

# 15.407(b)(2) Undesirable Emission Limits 5.25-5.35GHz

## **Test Data**

Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • (510) 249 - 1170

Customer: **Digital Path** 

Specification: 15.407(b) / 15.209 Radiated Spurious Emissions

Work Order #:92682Date:6/2/2012Test Type:Radiated ScanTime:09:51:29Equipment:5GHz Panel (18dBi) + Omni (11dBi)Sequence#:211Manufacturer:Digital PathTested By:E. Wong

Model: G5RL10G S/N: EMI 2

Test Equipment:

|     | pintentt |  |                              |                  |              |
|-----|----------|--|------------------------------|------------------|--------------|
| ID  | Asset #  | Description  | Model                        | Calibration Date | Cal Due Date |
| T1  | AN02668  | Spectrum Analyzer  | E4446A                       | 2/23/2011        | 2/23/2013    |
| T2  | AN02157  | Horn Antenna-ANSI<br>C63.5                                   | 3115                         | 1/17/2011        | 1/17/2013    |
| Т3  | AN03302  | Cable  | 32026-29094K-<br>29094K-72TC | 3/21/2012        | 3/21/2014    |
| T4  | ANP01210 | Cable  | FSJ1P-50A-4A                 | 3/15/2011        | 3/15/2013    |
| Т5  | ANP05913 | Cable  | 32022-29094K-<br>65TC        | 8/30/2011        | 8/30/2013    |
| Т6  | AN03114  | Preamp   | AMF-7D-<br>00101800-30-10P   | 5/13/2011        | 5/13/2013    |
|     | ANP05935 | Attenuator   | 84A-10                       | 10/19/2011       | 10/19/2013   |
|     | ANP01211 | Attenuator   | 23-10-34                     | 4/15/2011        | 4/15/2013    |
|     | AN01417  | High Pass Filter   | 84300-80039                  | 2/9/2012         | 2/9/2014     |
|     | AN02694  | Active Horn<br>Antenna-ANSI<br>C63.5 Antenna<br>Factors (dB) | AMFW-5F-<br>18002650-20-10P  | 11/10/2010       | 11/10/2012   |
|     | AN02695  | Active Horn<br>Antenna-ANSI<br>C63.5 Antenna<br>Factors (dB) | AMFW-5F-<br>260400-33-8P     | 11/10/2010       | 11/10/2012   |
|     | ANP05911 | Cable  | 32022-29094K-<br>65TC        | 8/30/2011        | 8/30/2013    |
| T7  | AN00852  | Biconilog Antenna  | CBL 6111C                    | 11/16/2010       | 11/16/2012   |
| T8  | AN00730  | Preamp   |                              | 1/31/2011        | 1/31/2013    |
| Т9  | ANP05299 | Cable  | RG214                        | 3/6/2011         | 3/6/2013     |
| T10 | ANP05300 | Cable  | RG214/U                      | 3/7/2011         | 3/7/2013     |
| T11 | ANP05440 | Cable  |                              | 3/7/2011         | 3/7/2013     |
|     | AN00432  | Loop Antenna   | 6502                         | 3/31/2011        | 3/31/2013    |

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#### Equipment Under Test (\* = EUT):

| Function             | Manufacturer | Model # | S/N   |
|----------------------|--------------|---------|-------|
| 5GHz Panel (18dBi) + | Digital Path | G5RL10G | EMI 2 |
| Omni (11dBi)*        |              |         |       |

#### Support Devices:

| Function            | Manufacturer | Model #       | S/N             |
|---------------------|--------------|---------------|-----------------|
| Laptop Computer     | HP           | ProBook 6565b | 5CB13637ZF      |
| Laptop Power Supply | HP           | 608428-002    | F12941126327228 |

#### Test Conditions / Notes:

The EUT installed on a pole as intended. DC power port is connected to a DC power supply via a CAT5 cable. The Ethernet port is connected to a remote laptop via unshielded twisted pair.

The Remote laptop is running test software to exercise the intended functionalities. Representing the worst case configuration for the product series, Receiver circuit and GPS receiver are active.

11dBi Omni antenna is connected to radio 0 (instance 1)

18 dBi panel antenna is connected to radio1 (instance 2)

This data sheet is for the EUT transmitting via 18dBi Panel antenna connected to radio 1 (instance 2). Recoded data is from the non-intentional radiation of the product.

Freq: 5590MHz BW= 10MHz

802.11a: 24 Mbps, TX power setting= 21

Temperature: 21.9°C, Relative Humidity: 38-43%, Atmospheric Pressure: 101.5kPa

Frequency range of measurement = 9kHz-40GHz.

9 kH -150 kHz; RBW=200 Hz, VBW=200 Hz;150 kHz-30 MHz; RBW=9 kHz, VBW=9 kHz;30 MHz-1000 MHz; RBW=120 kHz, VBW=120 kHz,1000 MHz-40,000 MHz; RBW=1 MHz, VBW=1 MHz.

Recorded emission level is below the EIRP limit of -27dBm/MHz (68.2dBuV/m @ 3 meter) IAW 789033 D01 General UNII Test Procedures V01r01

#### Ext Attn: 0 dB

| Measu | rement Data: | Re        | eading lis | ted by ma | argin. |       | Τe    | est Distance   | e: 3 Meters    |        |       |
|-------|--------------|-----------|------------|-----------|--------|-------|-------|----------------|----------------|--------|-------|
| #     | Freq         | Rdng      | T1         | T2        | T3     | T4    | Dist  | Corr           | Spec           | Margin | Polar |
|       |              |           | T5         | T6        | T7     | T8    |       |                |                |        |       |
|       |              |           | T9         | T10       | T11    |       |       |                |                |        |       |
|       | MHz          | $dB\mu V$ | dB         | dB        | dB     | dB    | Table | $dB\mu V/m \\$ | $dB\mu V/m \\$ | dB     | Ant   |
| 1     | 32.597M      | 48.7      | +0.0       | +0.0      | +0.0   | +0.0  | +0.0  | 39.6           | 40.0           | -0.4   | Vert  |
|       | QP           |           | +0.0       | +0.0      | +18.1  | -27.6 |       |                |                |        |       |
|       |              |           | +0.0       | +0.1      | +0.3   |       |       |                |                |        |       |
| ٨     | 32.597M      | 49.6      | +0.0       | +0.0      | +0.0   | +0.0  | +0.0  | 40.5           | 40.0           | +0.5   | Vert  |
|       |              |           | +0.0       | +0.0      | +18.1  | -27.6 |       |                |                |        |       |
|       |              |           | +0.0       | +0.1      | +0.3   |       |       |                |                |        |       |
| 3     | 51.817M      | 57.8      | +0.0       | +0.0      | +0.0   | +0.0  | +0.0  | 39.2           | 40.0           | -0.8   | Vert  |
|       | QP           |           | +0.0       | +0.0      | +8.3   | -27.5 |       |                |                |        |       |
|       |              |           | +0.0       | +0.2      | +0.4   |       |       |                |                |        |       |
| ٨     | 51.817M      | 60.0      | +0.0       | +0.0      | +0.0   | +0.0  | +0.0  | 41.4           | 40.0           | +1.4   | Vert  |
|       |              |           | +0.0       | +0.0      | +8.3   | -27.5 |       |                |                |        |       |
|       |              |           | +0.0       | +0.2      | +0.4   |       |       |                |                |        |       |

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| S 765.509M   |               |        |      |      |      |       |       |              |       |       |              |
|--|---------------|--------|------|------|------|-------|-------|--------------|-------|-------|--------------|
| +0.2   |               | 48.3   |      |      |      |       | +0.0  | 45.0         | 46.0  | -1.0  | Vert         |
| ^ 765,599M         50.9         +0.0         +0.0         +0.0         +0.0         +0.0         47.6         46.0         +1.6         Vert           7         30.627M         48.3         +0.0   | QP            |        |      |      |      | -27.3 |       |              |       |       |              |
| +0.0   |               |        |      |      |      |       |       |              | 4.5.5 |       |              |
| 7 30.627M 48.3 +0.0 +0.0 +0.0 +0.0 +0.0 39.0 40.0 -1.0 Vert QP +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 39.0 40.0 -1.0 Vert QP +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 41.8 40.0 +1.8 Vert +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 41.8 40.0 +1.8 Vert +0.0 +0.0 +0.0 +0.0 +0.0 42.0 45.0 46.0 -1.0 Horiz QP +0.0 +0.0 +0.0 +0.0 +0.0 45.0 46.0 -1.0 Horiz QP +0.0 +0.0 +0.0 +0.0 +0.0 47.3 46.0 +1.3 Horiz +0.0 +0.0 +0.0 +0.0 +0.0 40.0 47.3 46.0 +1.3 Horiz +0.0 +0.0 +0.0 +0.0 +0.0 40.0 42.1 43.5 -1.4 Vert QP +0.0 +0.0 +0.0 +0.0 +0.0 42.1 43.5 -1.4 Vert QP +0.0 +0.0 +0.0 +0.0 +0.0 42.1 43.5 -1.4 Vert QP +0.0 +0.0 +0.0 +0.0 +0.0 42.8 43.5 -0.7 Vert +0.1 +0.4 +0.8 +0.0 +0.0 +0.0 +0.0 42.8 43.5 -0.7 Vert +0.1 +0.4 +0.8 +0.0 +0.0 +0.0 +0.0 44.4 46.0 -1.6 Horiz QP +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 42.8 43.5 +0.7 Vert +0.1 +0.4 +0.8 +0.0 +0.0 +0.0 +0.0 42.9 46.0 -3.1 Vert QP +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 42.9 46.0 -3.1 Vert QP +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 42.9 46.0 -3.1 Vert QP +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 42.9 46.0 -3.1 Vert QP +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 42.9 46.0 -3.1 Vert QP +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 42.9 46.0 -3.1 Vert QP +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 42.9 46.0 -3.1 Vert QP +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 42.9 46.0 -3.8 Vert QP +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 42.9 46.0 -1.6 Vert +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 42.9 46.0 -3.8 Vert QP +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 42.0 46.0 -4.0 Vert QP +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 42.0 46.0 -1.1 Vert QP +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 42.0 46.0 -1.1 Vert QP +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 42.0 46.0 -1.1 Vert QP +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 42.0 46.0 -1.1 Vert QP +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 42.0 46.0 -1.1 Vert QP +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 42.0 46.0 -3.8 Vert QP +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 42.0 46.0 -3.8 Vert QP +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 42.0 46.0 -3.8 Vert QP +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 42.0 46.0 -3.8 Vert QP +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 42.0 46.0 -3.8 Vert QP +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 42.0 46.0 -3.8 Vert QP +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 42.0 46.0 -3.8 Vert QP +0.0 +0.0 +0.0 +0.0 +0.0 + | ^ 765.509M    | 50.9   |      |      |      |       | +0.0  | 47.6         | 46.0  | +1.6  | Vert         |
| 7 30.627M  |               |        |      |      |      | -27.3 |       |              |       |       |              |
| QP         +0.0         +0.0         +17.9         -27.6           ^ 30.627M         51.1         +0.0         +0.0         +0.0         +0.0         +0.0         41.8         40.0         +1.8         Vert           +0.0         +0.0         +0.0         +0.0         +0.0         +0.0         41.8         40.0         +1.8         Vert           +0.0         +0.0         +0.1         +0.3         -0.0         +0.0         +0.0         45.0         46.0         -1.0         Horiz           QP         +0.0         +0.0         +0.0         +0.0         +0.0         +0.0         46.0         -1.0         Horiz           -0.7         +0.0         +0.0         +0.0         +0.0         +0.0         +0.0         40.0         +1.3         Horiz           QP         +0.0   |               |        |      |      |      |       |       |              |       |       |              |
| 1  |               | 48.3   |      |      |      |       | +0.0  | 39.0         | 40.0  | -1.0  | Vert         |
| ^ 30.627M 51.1 +0.0 +0.0 +0.0 +0.0 +0.0 41.8 40.0 +1.8 Vert +0.0 +0.0 +0.0 +17.9 -27.6 +0.0 +0.0 +0.0 +0.0 +0.0 45.0 46.0 -1.0 Horiz +0.3 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 45.0 46.0 -1.0 Horiz QP +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 47.3 46.0 +1.3 Horiz +0.2 +0.9 +1.7 +0.0 +0.0 +0.0 +0.0 +0.0 47.3 46.0 +1.3 Horiz +0.2 +0.9 +1.7 +1.7 +1.1 191.995M 59.3 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 42.1 43.5 -1.4 Vert QP +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 42.1 43.5 -1.4 Vert QP +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.  | QP            |        |      |      |      | -27.6 |       |              |       |       |              |
| +0.0   |               |        |      |      |      |       | - 0.5 | - 4.5        | 40.5  |       |              |
| 9 765.572M   | ^ 30.627M     | 51.1   |      |      |      |       | +0.0  | 41.8         | 40.0  | +1.8  | Vert         |
| 9 765.572M   |               |        |      |      |      | -27.6 |       |              |       |       |              |
| QP         +0.0         +0.0         +21.2         -27.3           ^ 765.572M         50.6         +0.0         +0.0         +0.0         +0.0         40.0         47.3         46.0         +1.3         Horiz           -0.2         +0.0         +0.0         +0.0         +0.0         +0.0         +0.0         47.3         46.0         +1.3         Horiz           -1.0         +0.0         +0.0         +0.0         +0.0         +0.0         +0.0         42.1         43.5         -1.4         Vert           QP         +0.0         +0.0         +0.0         +0.0         +0.0         +0.0         42.8         43.5         -1.4         Vert           QP         +0.1         +0.4         +0.8         +0.0         +0.0         +0.0         +0.0         42.8         43.5         -0.7         Vert           13         761.572M         47.8         +0.0         +0.0         +0.0         +0.0         +0.0         44.4         46.0         -1.6         Horiz           QP         +0.1         +0.0         +0.0         +0.0         +0.0         +0.0         44.4         46.0         -1.6         Horiz           15         <   | <u> </u>      |        |      |      |      |       |       |              |       |       |              |
| +0.2   |               | 48.3   |      |      |      |       | +0.0  | 45.0         | 46.0  | -1.0  | Horiz        |
| ^ 765.572M   | QP            |        |      |      |      | -27.3 |       |              |       |       |              |
| +0.0   |               |        |      |      |      |       |       |              |       |       |              |
| 11   191,995M   59.3   +0.0   +0.0   +0.0   +0.0   +0.0   +0.0   42.1   43.5   -1.4   Vert   | ^ 765.572M    | 50.6   |      |      |      |       | +0.0  | 47.3         | 46.0  | +1.3  | Horiz        |
| 11   191.995M   59.3   |               |        |      |      |      | -27.3 |       |              |       |       |              |
| QP   | 14 404 00     |        |      |      |      |       |       | 40.1         | 10.7  |       | * 7          |
| +0.1   |               | 59.3   |      |      |      |       | +0.0  | 42.1         | 43.5  | -1.4  | Vert         |
| ^ 191.995M 60.0  | QP            |        |      |      |      | -21.5 |       |              |       |       |              |
| +0.0   | A 404.00#7.5  | - CO O |      |      |      | .0.0  | .0.0  | 40.0         | 40.5  |       | τ,           |
| 13   761.572M   27.8   47.8   +0.0   +0.0   +0.0   +0.0   +0.0   +0.0   44.4   46.0   -1.6   Horiz   | ^ 191.995M    | 60.0   |      |      |      |       | +0.0  | 42.8         | 43.5  | -0.7  | Vert         |
| 13   761.572M   27.8   27.2   27.3   27.3   27.3   27.4   27.3    |               |        |      |      |      | -21.5 |       |              |       |       |              |
| QP       +0.0       +0.0       +21.1       -27.3         ^ 761.572M       49.8       +0.0       +0.0       +0.0       +0.0       +0.0       46.4       46.0       +0.4       Horiz         +0.0       +0.0       +0.0       +0.0       +0.0       +0.0       +0.0       46.4       46.0       +0.4       Horiz         +0.0       +0.0       +0.0       +0.0       +0.0       +0.0       +0.0       +0.0       42.9       46.0       -3.1       Vert         QP       +0.0       +0.0       +0.0       +0.0       +0.0       +0.0       +0.0       42.9       46.0       -3.1       Vert         Polo       +0.0       +0.0       +0.0       +0.0       +0.0       +0.0       42.9       46.0       -3.1       Vert         Polo       +0.0       +0.0       +0.0       +0.0       +0.0       +0.0       44.4       46.0       -1.6       Vert         Polo       +0.0       +0.0       +0.0       +0.0       +0.0       +0.0       44.4       46.0       -1.6       Vert         Polo       +0.9       +1.8       -27.2       -27.2       -27.2       -27.2       -27.2       -27.2   | 10 501 550 5  | 47.0   |      |      |      | .0.0  | .0.0  |              | 460   | 4 -   |              |
| +0.2 +0.9 +1.7  *** 761.572M** 49.8 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 46.4 46.0 +0.4 Horiz +0.0 +0.0 +0.0 +21.1 -27.3 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0  |               | 47.8   |      |      |      |       | +0.0  | 44.4         | 46.0  | -1.6  | Horiz        |
| ^ 761.572M   | QP            |        |      |      |      | -21.3 |       |              |       |       |              |
| +0.0   | A 721 5500    | 40.0   |      |      |      | .0.0  | .0.0  | 161          | 160   |       | - TT ·       |
| Ho.2   Ho.9   H1.7   Ho.0      | ^ 761.572M    | 49.8   |      |      |      |       | +0.0  | 46.4         | 46.0  | +0.4  | Horiz        |
| 15   |               |        |      |      |      | -21.3 |       |              |       |       |              |
| QP   | 15 01600035   | 45.0   |      |      |      | .0.0  | .00   | 40.0         | 460   | - 2.1 | <b>T7</b> ·  |
| **Note of the image is a state |               | 45.3   |      |      |      |       | +0.0  | 42.9         | 46.0  | -3.1  | vert         |
| ^ 816.009M       46.8       +0.0       +0.0       +0.0       +0.0       +0.0       +0.0       44.4       46.0       -1.6       Vert         +0.0       +0.0       +0.0       +21.9       -27.2       -27.2       -27.2       -27.2       -27.2       -27.2       -27.2       -27.2       -27.2       -27.2       -27.2       -27.2       -27.2       -27.2       -27.2       -27.2       -27.2       -27.2       -27.2       -27.6       -27.2   | QР            |        |      |      |      | -21.2 |       |              |       |       |              |
| +0.0 +0.0 +21.9 -27.2 +0.2 +0.9 +1.8    17 43.795M 51.5 +0.0 +0.0 +0.0 +0.0 +0.0 36.2 40.0 -3.8 Vert   QP +0.0 +0.0 +0.2 +0.3    ^ 43.795M 54.2 +0.0 +0.0 +0.0 +0.0 +0.0 38.9 40.0 -1.1 Vert   +0.0 +0.0 +11.8 -27.6   +0.0 +0.0 +11.8 -27.6   +0.0 +0.0 +11.8 -27.6    19 720.009M 46.3 +0.0 +0.0 +0.0 +0.0 +0.0 42.0 46.0 -4.0 Vert   QP +0.0 +0.0 +20.2 -27.2   +0.2 +0.8 +1.7    ^ 720.009M 46.5 +0.0 +0.0 +0.0 +0.0 +0.0 42.2 46.0 -3.8 Vert   +0.0 +0.0 +20.2 -27.2   +0.2 +0.8 +1.7    21 695.350M 46.8 +0.0 +0.0 +0.0 +0.0 +0.0 42.0 46.0 -4.0 Horiz   +0.0 +0.0 +19.8 -27.2   | A 017.00037   | 460    |      |      |      | .00   | .00   | 4 4 4        | 460   | 1 -   | <b>T7</b> ·  |
| +0.2 +0.9 +1.8  17 43.795M 51.5 +0.0 +0.0 +0.0 +0.0 +0.0 36.2 40.0 -3.8 Vert QP +0.0 +0.0 +11.8 -27.6 +0.0 +0.2 +0.3  A 43.795M 54.2 +0.0 +0.0 +0.0 +0.0 +0.0 38.9 40.0 -1.1 Vert +0.0 +0.0 +11.8 -27.6 +0.0 +0.2 +0.3  19 720.009M 46.3 +0.0 +0.0 +0.0 +0.0 +0.0 42.0 46.0 -4.0 Vert QP +0.0 +0.0 +20.2 -27.2 +0.2 +0.8 +1.7  A 720.009M 46.5 +0.0 +0.0 +0.0 +0.0 +0.0 42.2 46.0 -3.8 Vert +0.0 +0.0 +20.2 -27.2 +0.2 +0.8 +1.7  21 695.350M 46.8 +0.0 +0.0 +0.0 +0.0 +0.0 42.0 46.0 -4.0 Horiz +0.0 +0.0 +19.8 -27.2   | ^ 816.009M    | 46.8   |      |      |      |       | +0.0  | 44.4         | 46.0  | -1.6  | vert         |
| 17 43.795M 51.5 +0.0 +0.0 +0.0 +0.0 +0.0 36.2 40.0 -3.8 Vert +0.0 +0.0 +0.0 +0.0 +0.0 36.2 40.0 -3.8 Vert +0.0 +0.0 +0.0 +0.0 +0.0 38.9 40.0 -1.1 Vert +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 38.9 40.0 -1.1 Vert +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 42.0 46.0 -4.0 Vert QP +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 42.0 46.0 -4.0 Vert +0.2 +0.8 +1.7 -4.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 42.2 46.0 -3.8 Vert +0.0 +0.0 +0.0 +20.2 -27.2 +0.2 +0.8 +1.7 -4.0 +0.0 +0.0 +0.0 +0.0 42.0 46.0 -3.8 Vert +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 42.0 46.0 -4.0 Horiz +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 42.0 46.0 -4.0 Horiz  |               |        |      |      |      | -21.2 |       |              |       |       |              |
| QP   | 17 42 7053 5  | £1 7   |      |      |      | .00   | .00   | 26.2         | 40.0  | 2.0   | <b>T7</b>    |
| +0.0 +0.2 +0.3  ^ 43.795M 54.2 +0.0 +0.0 +0.0 +0.0 +0.0 38.9 40.0 -1.1 Vert +0.0 +0.0 +11.8 -27.6 +0.0 +0.2 +0.3  19 720.009M 46.3 +0.0 +0.0 +0.0 +0.0 +0.0 42.0 46.0 -4.0 Vert QP +0.0 +0.0 +20.2 -27.2 +0.2 +0.8 +1.7  ^ 720.009M 46.5 +0.0 +0.0 +0.0 +0.0 +0.0 42.2 46.0 -3.8 Vert +0.0 +0.0 +20.2 -27.2 +0.2 +0.8 +1.7  21 695.350M 46.8 +0.0 +0.0 +0.0 +0.0 +0.0 42.0 46.0 -4.0 Horiz +0.0 +0.0 +19.8 -27.2   |               | 51.5   |      |      |      |       | +0.0  | 56.2         | 40.0  | -3.8  | vert         |
| ^ 43.795M       54.2       +0.0       +0.0       +0.0       +0.0       +0.0       38.9       40.0       -1.1       Vert         +0.0       +0.0       +0.0       +11.8       -27.6       -27.6       -27.6       -27.6       -27.6       -27.6       -27.2   | Qr            |        |      |      |      | -27.6 |       |              |       |       |              |
| +0.0 +0.0 +11.8 -27.6<br>+0.0 +0.2 +0.3<br>19 720.009M 46.3 +0.0 +0.0 +0.0 +0.0 +0.0 42.0 46.0 -4.0 Vert<br>QP +0.0 +0.0 +20.2 -27.2<br>+0.2 +0.8 +1.7<br>^ 720.009M 46.5 +0.0 +0.0 +0.0 +0.0 +0.0 42.2 46.0 -3.8 Vert<br>+0.0 +0.0 +20.2 -27.2<br>+0.2 +0.8 +1.7<br>21 695.350M 46.8 +0.0 +0.0 +0.0 +0.0 +0.0 42.0 46.0 -4.0 Horiz<br>+0.0 +0.0 +19.8 -27.2   | A 42 7053 4   | 540    |      |      |      | 100   | 100   | 20.0         | 40.0  | 1 1   | <b>17</b> =4 |
| +0.0 +0.2 +0.3  19 720.009M 46.3 +0.0 +0.0 +0.0 +0.0 +0.0 42.0 46.0 -4.0 Vert QP +0.0 +0.0 +20.2 -27.2 +0.2 +0.8 +1.7  ^ 720.009M 46.5 +0.0 +0.0 +0.0 +0.0 +0.0 42.2 46.0 -3.8 Vert +0.0 +0.0 +20.2 -27.2 +0.2 +0.8 +1.7  21 695.350M 46.8 +0.0 +0.0 +0.0 +0.0 +0.0 42.0 46.0 -4.0 Horiz +0.0 +0.0 +19.8 -27.2   | ^ 43./95M     | 54.2   |      |      |      |       | +0.0  | <i>5</i> 8.9 | 40.0  | -1.1  | vert         |
| 19 720.009M 46.3 +0.0 +0.0 +0.0 +0.0 +0.0 42.0 46.0 -4.0 Vert  QP +0.0 +0.0 +20.2 -27.2  +0.2 +0.8 +1.7  ^ 720.009M 46.5 +0.0 +0.0 +0.0 +0.0 +0.0 42.2 46.0 -3.8 Vert  +0.0 +0.0 +20.2 -27.2  +0.2 +0.8 +1.7  21 695.350M 46.8 +0.0 +0.0 +0.0 +0.0 +0.0 42.0 46.0 -4.0 Horiz  +0.0 +0.0 +19.8 -27.2  |               |        |      |      |      | -27.6 |       |              |       |       |              |
| QP   | 10 720 0003 4 | 16.2   |      |      |      | 100   | 100   | 42.0         | 460   | 4.0   | 17           |
| +0.2 +0.8 +1.7  ^ 720.009M   |               | 40.3   |      |      |      |       | +0.0  | 4Z.U         | 40.0  | -4.0  | vert         |
| ^ 720.009M   | ŲΓ            |        |      |      |      | -21.2 |       |              |       |       |              |
| +0.0 +0.0 +20.2 -27.2<br>+0.2 +0.8 +1.7<br>21 695.350M 46.8 +0.0 +0.0 +0.0 +0.0 +0.0 42.0 46.0 -4.0 Horiz<br>+0.0 +0.0 +19.8 -27.2   | A 700 000 #   | 165    |      |      |      | 100   | -100  | 42.2         | 160   | 20    | Vont         |
| +0.2 +0.8 +1.7<br>21 695.350M 46.8 +0.0 +0.0 +0.0 +0.0 +0.0 42.0 46.0 -4.0 Horiz<br>+0.0 +0.0 +19.8 -27.2  | · /20.009M    | 40.5   |      |      |      |       | +0.0  | 42.2         | 40.0  | -3.8  | vert         |
| 21 695.350M 46.8 +0.0 +0.0 +0.0 +0.0 +0.0 42.0 46.0 -4.0 Horiz<br>+0.0 +0.0 +19.8 -27.2  |               |        |      |      |      | -21.2 |       |              |       |       |              |
| +0.0 +0.0 +19.8 -27.2  | 21 605 25034  | 160    |      |      |      | 100   | -100  | 42.0         | 160   | 4.0   | По:-         |
|  | 21 093.33UM   | 40.8   |      |      |      |       | +0.0  | 42.0         | 40.0  | -4.0  | попх         |
| +0.2 +0.0 +1.0   |               |        |      |      |      | -21.2 |       |              |       |       |              |
|  |               |        | +0.2 | +∪.8 | +1.0 |       |       |              |       |       |              |

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| 22 863.999M  | 44.2 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 41.7 | 46.0 | -4.3 | Vert  |
|--------------|------|------|-------|-------|-------|------|------|------|------|-------|
|              |      | +0.0 | +0.0  | +21.8 | -27.3 |      |      |      |      |       |
|              |      | +0.2 | +1.0  | +1.8  |       |      |      |      |      |       |
| 23 898.460M  | 44.1 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 41.6 | 46.0 | -4.4 | Vert  |
|              |      | +0.0 | +0.0  | +21.8 | -27.4 |      |      |      |      |       |
|              |      | +0.2 | +1.0  | +1.9  |       |      |      |      |      |       |
| 24 912.000M  | 43.8 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 41.2 | 46.0 | -4.8 | Vert  |
|              |      | +0.0 | +0.0  | +21.8 | -27.5 |      |      |      |      |       |
|              |      | +0.2 | +1.0  | +1.9  |       |      |      |      |      |       |
| 25 65.757M   | 55.6 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 34.8 | 40.0 | -5.2 | Vert  |
| QP           |      | +0.0 | +0.0  | +6.1  | -27.5 |      |      |      |      |       |
|              |      | +0.0 | +0.2  | +0.4  |       |      |      |      |      |       |
| ^ 65.757M    | 57.5 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 36.7 | 40.0 | -3.3 | Vert  |
|              |      | +0.0 | +0.0  | +6.1  | -27.5 |      |      |      |      |       |
|              |      | +0.0 | +0.2  | +0.4  |       |      |      |      |      |       |
| 27 39.480M   | 47.3 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 34.5 | 40.0 | -5.5 | Vert  |
|              |      | +0.0 | +0.0  | +14.3 | -27.6 |      |      |      |      |       |
|              |      | +0.0 | +0.2  | +0.3  |       |      |      |      |      |       |
| 28 960.000M  | 42.3 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 39.9 | 46.0 | -6.1 | Vert  |
|              |      | +0.0 | +0.0  | +22.1 | -27.8 |      |      |      |      |       |
|              |      | +0.3 | +1.0  | +2.0  |       |      |      |      |      |       |
| 29 165.607M  | 52.9 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 36.6 | 43.5 | -6.9 | Vert  |
| QP           |      | +0.0 | +0.0  | +10.1 | -27.5 |      |      |      |      |       |
|              |      | +0.1 | +0.3  | +0.7  |       |      |      |      |      |       |
| ^ 165.607M   | 54.6 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 38.3 | 43.5 | -5.2 | Vert  |
|              |      | +0.0 | +0.0  | +10.1 | -27.5 |      |      |      |      |       |
|              |      | +0.1 | +0.3  | +0.7  |       |      |      |      |      |       |
| 31 287.995M  | 51.9 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 38.9 | 46.0 | -7.1 | Vert  |
|              |      | +0.0 | +0.0  | +12.9 | -27.5 |      |      |      |      |       |
|              |      | +0.1 | +0.5  | +1.0  |       |      |      |      |      |       |
| 32 875.010M  | 40.9 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 38.5 | 46.0 | -7.5 | Vert  |
|              |      | +0.0 | +0.0  | +21.8 | -27.3 |      |      |      |      |       |
|              |      | +0.2 | +1.0  | +1.9  |       |      |      |      |      |       |
| 33 794.590M  | 41.0 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 38.4 | 46.0 | -7.6 | Vert  |
|              |      | +0.0 | +0.0  | +21.8 | -27.2 |      |      |      |      |       |
|              |      | +0.2 | +0.9  | +1.7  |       |      |      |      |      |       |
| 34 4267.000M | 66.2 | +0.0 | +32.7 | +1.4  | +3.9  | +0.0 | 45.9 | 54.0 | -8.1 | Vert  |
|              |      | +1.4 | -59.7 | +0.0  | +0.0  |      |      |      |      |       |
|              |      | +0.0 | +0.0  | +0.0  |       |      |      |      |      |       |
| 35 1030.500M | 78.3 | +0.0 | +23.5 | +0.7  | +1.8  | +0.0 | 45.3 | 54.0 | -8.7 | Horiz |
|              |      | +0.7 | -59.7 | +0.0  | +0.0  |      |      |      |      |       |
|              |      | +0.0 | +0.0  | +0.0  |       |      |      |      |      |       |
| 36 765.450M  | 40.4 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 37.1 | 46.0 | -8.9 | Horiz |
|              |      | +0.0 | +0.0  | +21.2 | -27.3 |      |      |      |      |       |
|              |      | +0.2 | +0.9  | +1.7  |       |      |      |      |      |       |
| 37 231.780M  | 51.9 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 37.1 | 46.0 | -8.9 | Vert  |
|              |      | +0.0 | +0.0  | +11.3 | -27.5 |      |      |      |      |       |
|              |      | +0.1 | +0.4  | +0.9  |       |      |      |      |      |       |
| 38 88.850M   | 52.6 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 34.6 | 43.5 | -8.9 | Vert  |
|              |      | +0.0 | +0.0  | +8.7  | -27.4 |      |      |      |      |       |
|              |      | +0.0 | +0.2  | +0.5  |       |      |      |      |      |       |
|              |      |      |       |       |       |      |      |      |      |       |

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| 39       | 528.000M  | 43.8 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 37.0 | 46.0 | -9.0  | Horiz |
|----------|-----------|------|------|-------|-------|-------|------|------|------|-------|-------|
|          |           |      | +0.0 | +0.0  | +18.2 | -27.3 |      |      |      |       |       |
|          |           |      | +0.2 | +0.7  | +1.4  |       |      |      |      |       |       |
| 40       | 4324.000M | 64.9 | +0.0 | +32.5 | +1.4  | +3.9  | +0.0 | 44.5 | 54.0 | -9.5  | Horiz |
|          |           |      | +1.4 | -59.6 | +0.0  | +0.0  |      |      |      |       |       |
|          |           |      | +0.0 | +0.0  | +0.0  |       |      |      |      |       |       |
| 41       | 695.430M  | 40.7 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 35.9 | 46.0 | -10.1 | Vert  |
|          |           |      | +0.0 | +0.0  | +19.8 | -27.2 |      |      |      |       |       |
|          |           |      | +0.2 | +0.8  | +1.6  |       |      |      |      |       |       |
| 42       | 499.180M  | 43.2 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 35.8 | 46.0 | -10.2 | Vert  |
|          |           |      | +0.0 | +0.0  | +17.8 | -27.3 |      |      |      |       |       |
|          |           |      | +0.2 | +0.6  | +1.3  |       |      |      |      |       |       |
| 43       | 299.520M  | 48.4 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 35.7 | 46.0 | -10.3 | Vert  |
|          |           |      | +0.0 | +0.0  | +13.1 | -27.4 |      |      |      |       |       |
|          |           |      | +0.1 | +0.5  | +1.0  |       |      |      |      |       |       |
| 44       | 563.030M  | 41.8 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 35.5 | 46.0 | -10.5 | Vert  |
|          |           |      | +0.0 | +0.0  | +18.7 | -27.3 |      |      |      |       |       |
|          |           |      | +0.2 | +0.7  | +1.4  |       |      |      |      |       |       |
| 45       | 1397.000M | 75.3 | +0.0 | +24.0 | +0.8  | +2.1  | +0.0 | 43.3 | 54.0 | -10.7 | Horiz |
|          |           |      | +0.8 | -59.7 | +0.0  | +0.0  |      |      |      |       |       |
|          |           |      | +0.0 | +0.0  | +0.0  |       |      |      |      |       |       |
| 46       | 336.020M  | 46.6 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 34.8 | 46.0 | -11.2 | Vert  |
|          |           |      | +0.0 | +0.0  | +14.0 | -27.5 |      |      |      |       |       |
|          |           |      | +0.1 | +0.5  | +1.1  |       |      |      |      |       |       |
| 47       | 629.230M  | 40.1 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 34.7 | 46.0 | -11.3 | Vert  |
|          |           |      | +0.0 | +0.0  | +19.3 | -27.1 |      |      |      |       |       |
|          |           |      | +0.2 | +0.7  | +1.5  |       |      |      |      |       |       |
| 48       | 239.980M  | 48.6 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 34.3 | 46.0 | -11.7 | Vert  |
|          |           |      | +0.0 | +0.0  | +11.8 | -27.5 |      |      |      |       |       |
|          |           |      | +0.1 | +0.4  | +0.9  |       |      |      |      |       |       |
| 49       | 192.000M  | 48.1 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 30.9 | 43.5 | -12.6 | Horiz |
|          |           |      | +0.0 | +0.0  | +9.0  | -27.5 |      |      |      |       |       |
|          |           |      | +0.1 | +0.4  | +0.8  |       |      |      |      |       |       |
| 50       | 106.730M  | 46.7 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 30.7 | 43.5 | -12.8 | Vert  |
|          |           |      | +0.0 | +0.0  | +10.5 | -27.5 |      |      |      |       |       |
|          |           |      | +0.1 | +0.3  | +0.6  |       |      |      |      |       |       |
| 51       | 1396.000M | 72.9 | +0.0 | +24.0 | +0.8  | +2.1  | +0.0 | 40.9 | 54.0 | -13.1 | Vert  |
|          |           |      | +0.8 | -59.7 | +0.0  | +0.0  |      |      |      |       |       |
| <u> </u> |           |      | +0.0 | +0.0  | +0.0  |       |      |      |      |       |       |
| 52       | 96.000M   | 47.6 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 30.2 | 43.5 | -13.3 | Vert  |
|          |           |      | +0.0 | +0.0  | +9.5  | -27.6 |      |      |      |       |       |
|          |           |      | +0.0 | +0.2  | +0.5  |       |      |      |      |       |       |
| 53       | 399.200M  | 41.9 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 31.9 | 46.0 | -14.1 | Horiz |
|          |           |      | +0.0 | +0.0  | +15.5 | -27.4 |      |      |      |       |       |
|          |           |      | +0.1 | +0.6  | +1.2  |       |      |      |      |       |       |
| 54       | 624.000M  | 35.9 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 30.5 | 46.0 | -15.5 | Horiz |
|          |           |      | +0.0 | +0.0  | +19.3 | -27.1 |      |      |      |       |       |
|          |           |      | +0.2 | +0.7  | +1.5  |       |      |      |      |       |       |
| 55       | 32.610M   | 33.3 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 24.2 | 40.0 | -15.8 | Horiz |
|          |           |      | +0.0 | +0.0  | +18.1 | -27.6 |      |      |      |       |       |
|          |           |      | +0.0 | +0.1  | +0.3  |       |      |      |      |       |       |
|          |           |      |      |       |       |       |      |      |      |       |       |

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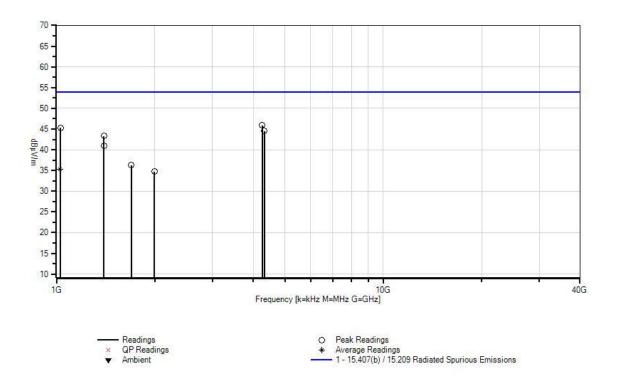


| 56 | 1696.000M | 66.6 | +0.0 | +25.1 | +0.9  | +2.3  | +0.0 | 36.3 | 54.0 | -17.7 | Vert  |
|----|-----------|------|------|-------|-------|-------|------|------|------|-------|-------|
|    |           |      | +0.9 | -59.5 | +0.0  | +0.0  |      |      |      |       |       |
|    |           |      | +0.0 | +0.0  | +0.0  |       |      |      |      |       |       |
| 57 | 232.900M  | 43.0 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 28.2 | 46.0 | -17.8 | Horiz |
|    |           |      | +0.0 | +0.0  | +11.3 | -27.5 |      |      |      |       |       |
|    |           |      | +0.1 | +0.4  | +0.9  |       |      |      |      |       |       |
| 58 | 144.010M  | 40.3 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 25.4 | 43.5 | -18.1 | Vert  |
|    |           |      | +0.0 | +0.0  | +11.4 | -27.4 |      |      |      |       |       |
|    |           |      | +0.1 | +0.3  | +0.7  |       |      |      |      |       |       |
| 59 | 1026.600M | 68.4 | +0.0 | +23.4 | +0.7  | +1.8  | +0.0 | 35.3 | 54.0 | -18.7 | Vert  |
|    | Ave       |      | +0.7 | -59.7 | +0.0  | +0.0  |      |      |      |       |       |
|    |           |      | +0.0 | +0.0  | +0.0  |       |      |      |      |       |       |
| ^  | 1026.600M | 83.9 | +0.0 | +23.4 | +0.7  | +1.8  | +0.0 | 50.8 | 54.0 | -3.2  | Vert  |
|    |           |      | +0.7 | -59.7 | +0.0  | +0.0  |      |      |      |       |       |
|    |           |      | +0.0 | +0.0  | +0.0  |       |      |      |      |       |       |
| 61 | 1993.000M | 63.3 | +0.0 | +26.5 | +1.0  | +2.5  | +0.0 | 34.7 | 54.0 | -19.3 | Vert  |
|    |           |      | +0.9 | -59.5 | +0.0  | +0.0  |      |      |      |       |       |
|    |           |      | +0.0 | +0.0  | +0.0  |       |      |      |      |       |       |
| 62 | 121.030M  | 38.0 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 23.1 | 43.5 | -20.4 | Vert  |
|    |           |      | +0.0 | +0.0  | +11.5 | -27.4 |      |      |      |       |       |
|    |           |      | +0.1 | +0.3  | +0.6  |       |      |      |      |       |       |
| 63 | 66.200M   | 39.6 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 18.8 | 40.0 | -21.2 | Horiz |
|    |           |      | +0.0 | +0.0  | +6.1  | -27.5 |      |      |      |       |       |
|    |           |      | +0.0 | +0.2  | +0.4  |       |      |      |      |       |       |
| 64 | 43.490M   | 33.7 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 18.6 | 40.0 | -21.4 | Horiz |
|    |           |      | +0.0 | +0.0  | +12.0 | -27.6 |      |      |      |       |       |
|    |           |      | +0.0 | +0.2  | +0.3  |       |      |      |      |       |       |
| 65 | 240.020M  | 35.9 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 21.6 | 46.0 | -24.4 | Horiz |
|    |           |      | +0.0 | +0.0  | +11.8 | -27.5 |      |      |      |       |       |
|    |           |      | +0.1 | +0.4  | +0.9  |       |      |      |      |       |       |

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CKC Laboratories, Inc. Date: 6/2/2012 Time: 09:51:29 Digital Path WO#: 92682 15.407(b) / 15.209 Radiated Spurious Emissions Test Distance: 3 Meters Sequence#: 211 Horiz UNII Bands. 20MHz Channel width.





Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • (510) 249 - 1170

Customer: **Digital Path** 

Specification: 15.407(b) / 15.209 Radiated Spurious Emissions

Work Order #:92682Date:5/27/2012Test Type:Radiated ScanTime:08:11:46Equipment:5GHz Tri-Sector (17dBi)Sequence#:200Manufacturer:Digital PathTested By:E. Wong

Model: G5RL10T S/N: EMI 1

#### Test Equipment:

| 1 est Equi | pintenti |                   |                 |                  |              |
|------------|----------|-------------------|-----------------|------------------|--------------|
| ID         | Asset #  | Description       | Model           | Calibration Date | Cal Due Date |
| T1         | AN02668  | Spectrum Analyzer | E4446A          | 2/23/2011        | 2/23/2013    |
| T2         | AN02157  | Horn Antenna-ANSI | 3115            | 1/17/2011        | 1/17/2013    |
|            |          | C63.5             |                 |                  |              |
| T3         | AN03302  | Cable             | 32026-29094K-   | 3/21/2012        | 3/21/2014    |
|            |          |                   | 29094K-72TC     |                  |              |
| T4         | ANP01210 | Cable             | FSJ1P-50A-4A    | 3/15/2011        | 3/15/2013    |
| T5         | ANP05913 | Cable             | 32022-29094K-   | 8/30/2011        | 8/30/2013    |
|            |          |                   | 65TC            |                  |              |
| Т6         | AN03114  | Preamp            | AMF-7D-         | 5/13/2011        | 5/13/2013    |
|            |          |                   | 00101800-30-10P |                  |              |
|            | ANP05935 | Attenuator        | 84A-10          | 10/19/2011       | 10/19/2013   |
|            | ANP01211 | Attenuator        | 23-10-34        | 4/15/2011        | 4/15/2013    |
| T7         | AN01417  | High Pass Filter  | 84300-80039     | 2/9/2012         | 2/9/2014     |
|            | AN02694  | Active Horn       | AMFW-5F-        | 11/10/2010       | 11/10/2012   |
|            |          | Antenna-ANSI      | 18002650-20-10P |                  |              |
|            |          | C63.5 Antenna     |                 |                  |              |
|            |          | Factors (dB)      |                 |                  |              |
|            | AN02695  | Active Horn       | AMFW-5F-        | 11/10/2010       | 11/10/2012   |
|            |          | Antenna-ANSI      | 260400-33-8P    |                  |              |
|            |          | C63.5 Antenna     |                 |                  |              |
|            |          | Factors (dB)      |                 |                  |              |
|            | ANP05911 | Cable             | 32022-29094K-   | 8/30/2011        | 8/30/2013    |
|            |          |                   | 65TC            |                  |              |
|            | AN00730  | Preamp            |                 | 1/31/2011        | 1/31/2013    |
|            | AN00432  | Loop Antenna      | 6502            | 3/31/2011        | 3/31/2013    |
|            | AN00852  | Biconilog Antenna | CBL 6111C       | 11/16/2010       | 11/16/2012   |
|            | ANP05299 | Cable             | RG214           | 3/6/2011         | 3/6/2013     |
|            | ANP05300 | Cable             | RG214/U         | 3/7/2011         | 3/7/2013     |
|            | ANP05440 | Cable             |                 | 3/7/2011         | 3/7/2013     |

# Equipment Under Test (\* = EUT):

| Function                 | Manufacturer | Model # | S/N   |
|--------------------------|--------------|---------|-------|
| 5GHz Tri-Sector (17dBi)* | Digital Path | G5RL10T | EMI 1 |

#### Support Devices:

| Function            | Manufacturer | Model #       | S/N             |
|---------------------|--------------|---------------|-----------------|
| Laptop Computer     | HP           | ProBook 6565b | 5CB13637ZF      |
| Laptop Power Supply | HP           | 608428-002    | F12941126327228 |

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## Test Conditions / Notes:

The EUT installed on a metal pole as intended. DC power port is connected to a DC power supply via a CAT5 cable. The Ethernet port is connected to a remote laptop via unshielded twisted pair.

The Remote laptop is running test software to exercise the intended functionalities. Receiver circuit is active.

Radio 0, TX

Radio 1, OFF

5250-5350HHz

Freq: 5275MHz, 5300MHz, 5325MHz.

BW = 10 MHz

802.11a: 24Mbps, TX power setting= 11,11,11

802.11n: 13MCSHT20 2S,TX power setting= 11,11,11

Freq: 5280MHz, 5300MHz, 5320MHz.

BW = 20MHz

802.11a: 9 Mbps, TX power setting= 12.5,13.5,13.5

802.11n: 6.5MCS HT20 1S, TX power setting= 12, 13.5,12

Temperature: 21.9 °C, Relative Humidity: 38-43%, Atmospheric Pressure: 101.5kPa

No emission found. Detection was performed with reduced resolution bandwidth, recorded data represent noise floor level at required BW.

Frequency range of measurement = 9kHz-40GHz.

9 kH -150 kHz; RBW=200 Hz, VBW=200 Hz;150 kHz-30 MHz; RBW=9 kHz, VBW=9 kHz;30 MHz-1000 MHz; RBW=120 kHz, VBW=120 kHz,1000 MHz-40,000 MHz; RBW=1 MHz, VBW=1 MHz.

Recorded emission level is below the EIRP limit of -27dBm/MHz (68.2dBuV/m @ 3 meter) IAW 789033 D01 General UNII Test Procedures V01r01

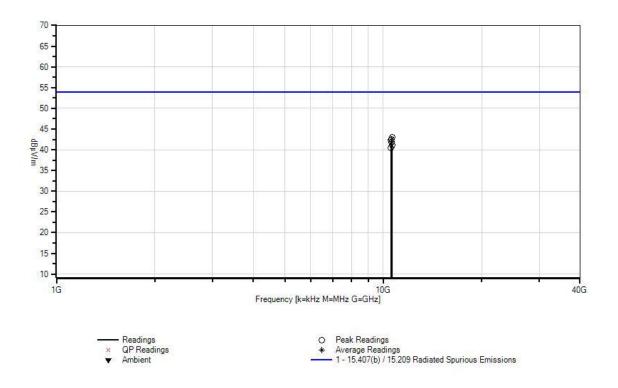
Ext Attn: 0 dB

| Measu | rement Data: | Re   | eading list | ted by ma | argin. |      | Τe    | est Distance | e: 3 Meters |        |       |
|-------|--------------|------|-------------|-----------|--------|------|-------|--------------|-------------|--------|-------|
| #     | Freq         | Rdng | T1          | T2        | T3     | T4   | Dist  | Corr         | Spec        | Margin | Polar |
|       |              |      | T5          | T6        | T7     |      |       |              |             |        |       |
|       | MHz          | dΒμV | dB          | dB        | dB     | dB   | Table | dBµV/m       | dBµV/m      | dB     | Ant   |
| 1     | 10641.000    | 51.3 | +0.0        | +39.3     | +2.3   | +6.7 | +0.0  | 43.0         | 54.0        | -11.0  | Horiz |
|       | M            |      | +2.1        | -58.7     | +0.0   |      |       |              |             |        |       |
|       |              |      |             |           |        |      |       |              |             |        |       |
| 2     | 10602.800    | 51.2 | +0.0        | +39.3     | +2.3   | +6.7 | +0.0  | 42.5         | 54.0        | -11.5  | Horiz |
|       | M            |      | +2.1        | -59.1     | +0.0   |      |       |              |             |        |       |
|       |              |      |             |           |        |      |       |              |             |        |       |
| 3     | 10546.000    | 51.1 | +0.0        | +39.3     | +2.3   | +6.7 | +0.0  | 42.3         | 54.0        | -11.7  | Vert  |
|       | M            |      | +2.1        | -59.2     | +0.0   |      |       |              |             |        |       |
|       |              |      |             |           |        |      |       |              |             |        |       |
| 4     | 10574.600    | 50.9 | +0.0        | +39.3     | +2.3   | +6.7 | +0.0  | 41.9         | 54.0        | -12.1  | Horiz |
|       | M            |      | +2.1        | -59.4     | +0.0   |      |       |              |             |        |       |
|       |              |      |             |           |        |      |       |              |             |        |       |
| 5     | 10640.000    | 49.4 | +0.0        | +39.3     | +2.3   | +6.7 | +0.0  | 41.1         | 54.0        | -12.9  | Horiz |
|       | M            |      | +2.1        | -58.7     | +0.0   |      |       |              |             |        |       |
|       |              |      |             |           |        |      |       |              |             |        |       |
| 6     | 10551.000    | 49.2 | +0.0        | +39.3     | +2.3   | +6.7 | +0.0  | 40.4         | 54.0        | -13.6  | Vert  |
|       | M            |      | +2.1        | -59.2     | +0.0   |      |       |              |             |        |       |
|       |              |      |             |           |        |      |       |              |             |        |       |

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CKC Laboratories, Inc. Date: 5/27/2012 Time: 08:11:46 Digital Path WO#: 92682 15.407(b) / 15.209 Radiated Spurious Emissions Test Distance: 3 Meters Sequence#: 200 Horiz UNII Bands. 20MHz Channel width.





Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • (510) 249 - 1170

Customer: **Digital Path** 

Specification: 15.407(b) / 15.209 Radiated Spurious Emissions

Work Order #:92682Date:5/29/2012Test Type:Radiated ScanTime:21:45:00Equipment:5GHz Sector (20 dBi)Sequence#:203Manufacturer:Digital PathTested By:E. Wong

Model: G5RL10E S/N: EMI 3

#### Test Equipment:

| ртен:    |   |   |   |   |
|----------|---|---|---|---|
|          |   |   |   | Cal Due Date  |
| AN02668  | Spectrum Analyzer   |   | 2/23/2011   | 2/23/2013   |
| AN02157  | C63.5   |   | 1/17/2011   | 1/17/2013   |
| AN03302  | Cable   | 32026-29094K-<br>29094K-72TC  | 3/21/2012   | 3/21/2014   |
| ANP01210 | Cable   | FSJ1P-50A-4A  | 3/15/2011   | 3/15/2013   |
| ANP05913 | Cable   | 32022-29094K-<br>65TC   | 8/30/2011   | 8/30/2013   |
| AN03114  | Preamp  | AMF-7D-<br>00101800-30-10P  | 5/13/2011   | 5/13/2013   |
| ANP05935 | Attenuator  | 84A-10  | 10/19/2011  | 10/19/2013  |
| ANP01211 | Attenuator  | 23-10-34  | 4/15/2011   | 4/15/2013   |
| AN01417  | High Pass Filter  | 84300-80039   | 2/9/2012  | 2/9/2014  |
| AN02694  | Active Horn<br>Antenna-ANSI<br>C63.5 Antenna<br>Factors (dB)  | AMFW-5F-<br>18002650-20-10P   |   | 11/10/2012  |
| AN02695  | Active Horn<br>Antenna-ANSI<br>C63.5 Antenna<br>Factors (dB)  | AMFW-5F-<br>260400-33-8P  | 11/10/2010  | 11/10/2012  |
| ANP05911 | Cable   | 32022-29094K-<br>65TC   | 8/30/2011   | 8/30/2013   |
| AN00730  | Preamp  |   | 1/31/2011   | 1/31/2013   |
| AN00432  | Loop Antenna  | 6502  | 3/31/2011   | 3/31/2013   |
| AN00852  | Biconilog Antenna   | CBL 6111C   | 11/16/2010  | 11/16/2012  |
| ANP05299 | Cable   | RG214   | 3/6/2011  | 3/6/2013  |
| ANP05300 | Cable   | RG214/U   | 3/7/2011  | 3/7/2013  |
| ANP05440 | Cable   |   | 3/7/2011  | 3/7/2013  |
|          | Asset # AN02668 AN02157  AN03302  ANP01210 ANP05913  AN03114  ANP05935 ANP01211 AN01417 AN02694  AN02695  ANP05911  AN00730 AN00432 AN00432 AN00852 ANP05299 ANP05300 | Asset #         Description           AN02668         Spectrum Analyzer           AN02157         Horn Antenna-ANSI C63.5           AN03302         Cable           ANP01210         Cable           ANP05913         Cable           ANP05913         Cable           ANP05935         Attenuator           ANP01211         Attenuator           AN01417         High Pass Filter           AN02694         Active Horn           Antenna-ANSI C63.5 Antenna Factors (dB)           AN02695         Active Horn Antenna-ANSI C63.5 Antenna Factors (dB)           ANP05911         Cable           AN00730         Preamp Anoutenna Anoutenna Anoutenna Anoutenna Biconilog Antenna Cable           ANP05299         Cable           ANP05300         Cable | Asset # Description Model AN02668 Spectrum Analyzer E4446A AN02157 Horn Antenna-ANSI 3115 C63.5  AN03302 Cable 32026-29094K- 29094K-72TC ANP01210 Cable FSJ1P-50A-4A ANP05913 Cable 32022-29094K- 65TC  AN03114 Preamp AMF-7D- 00101800-30-10P ANP05935 Attenuator 84A-10 ANP01211 Attenuator 23-10-34 AN01417 High Pass Filter 84300-80039 AN02694 Active Horn AMFW-5F- Antenna-ANSI 18002650-20-10P C63.5 Antenna Factors (dB)  AN02695 Active Horn AMFW-5F- Antenna-ANSI 260400-33-8P C63.5 Antenna Factors (dB)  ANP05911 Cable 32022-29094K- 65TC  AN00730 Preamp AN00432 Loop Antenna 6502 AN00852 Biconilog Antenna CBL 6111C ANP05299 Cable RG214/U | Asset # Description Model Calibration Date AN02668 Spectrum Analyzer E4446A 2/23/2011 AN02157 Horn Antenna-ANSI 3115 1/17/2011 C63.5  AN03302 Cable 32026-29094K- 3/21/2012 29094K-72TC  ANP01210 Cable FSJ1P-50A-4A 3/15/2011 ANP05913 Cable 32022-29094K- 65TC  AN03114 Preamp AMF-7D- 5/13/2011 O0101800-30-10P  ANP05935 Attenuator 84A-10 10/19/2011 AN01417 High Pass Filter 84300-80039 2/9/2012 AN02694 Active Horn AMFW-5F- 11/10/2010 Antenna-ANSI C63.5 Antenna Factors (dB)  AN02695 Active Horn AMFW-5F- 11/10/2010 Antenna-ANSI C63.5 Antenna Factors (dB)  AN02696 Active Horn AMFW-5F- 11/10/2010 Antenna-ANSI C63.5 Antenna Factors (dB)  AN0030 Preamp 1/31/2011 AN00432 Loop Antenna 6502 3/31/2011 AN00852 Biconilog Antenna CBL 6111C 11/16/2010 ANP05300 Cable RG214/U 3/7/2011 |

Equipment Under Test (\* = EUT):

| Function              | Manufacturer | Model # | S/N   |
|-----------------------|--------------|---------|-------|
| 5GHz Sector (20 dBi)* | Digital Path | G5RL10E | EMI 3 |

Support Devices:

| Function            | Manufacturer | Model #       | S/N             |
|---------------------|--------------|---------------|-----------------|
| Laptop Computer     | HP           | ProBook 6565b | 5CB13637ZF      |
| Laptop Power Supply | HP           | 608428-002    | F12941126327228 |

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#### Test Conditions / Notes:

The EUT installed on a metal pole as intended. DC power port is connected to a DC power supply via a CAT5 cable. The Ethernet port is connected to a remote laptop via unshielded twisted pair.

The Remote laptop is running test software to exercise the intended functionalities. Receiver circuit is active Vertical polarity of the antenna is connected to Card 1, Ant port 2

Horizontal polarity of the antenna is connected to Card 1, Ant port 0

Radio 0, OFF Radio 1, TX

5250-5350HHz

Freq: 5275MHz, 5300MHz, 5325MHz.

BW = 10 MHz

802.11a: 24Mbps, TX power= 10.5,10.5,10.5

802.11n: 13MCSHT20 2S,TX power= 10.5,10.5,10.5

Freq: 5280MHz, 5300MHz, 5320MHz.

BW = 20MHz

802.11a: 9 Mbps, TX power= 10.5,10.5,10.5

802.11n: 6.5MCS HT20 1S, TX power= 10.5,10.5,10.5

Temperature: 21.9°C, Relative Humidity: 38-43%, Atmospheric Pressure: 101.5kPa

No emission found. Detection was performed with reduced resolution bandwidth, recorded data represent noise floor level at required BW.

Frequency range of measurement = 9kHz-40GHz.

9 kH -150 kHz; RBW=200 Hz, VBW=200 Hz;150 kHz-30 MHz; RBW=9 kHz, VBW=9 kHz;30 MHz-1000 MHz; RBW=120 kHz, VBW=120 kHz,1000 MHz-40,000 MHz; RBW=1 MHz, VBW=1 MHz.

Recorded emission level is below the EIRP limit of -27dBm/MHz (68.2dBuV/m @ 3 meter) IAW 789033 D01 General UNII Test Procedures V01r01

Ext Attn: 0 dB

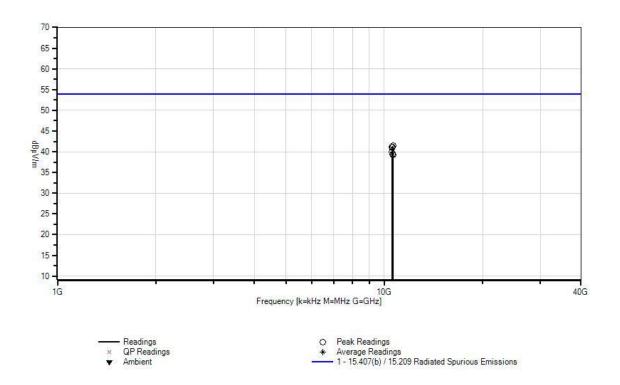
| Measu | <b>Teasurement Data:</b> Reading listed by margin. |      |      |       |      |      | Test Distance: 3 Meters |             |             |        |       |
|-------|--|------|------|-------|------|------|-------------------------|-------------|-------------|--------|-------|
| #     | Freq   | Rdng | T1   | T2    | T3   | T4   | Dist                    | Corr        | Spec        | Margin | Polar |
|       |  |      | T5   | T6    | T7   |      |                         |             |             |        |       |
|       | MHz  | dΒμV | dB   | dB    | dB   | dB   | Table                   | $dB\mu V/m$ | $dB\mu V/m$ | dB     | Ant   |
| 1     | 10640.000  | 49.7 | +0.0 | +39.3 | +2.3 | +6.7 | +0.0                    | 41.4        | 54.0        | -12.6  | Vert  |
|       | M  |      | +2.1 | -58.7 | +0.0 |      |                         |             |             |        |       |
|       |  |      |      |       |      |      |                         |             |             |        |       |
| 2     | 10557.700  | 50.1 | +0.0 | +39.3 | +2.3 | +6.7 | +0.0                    | 41.2        | 54.0        | -12.8  | Vert  |
|       | M  |      | +2.1 | -59.3 | +0.0 |      |                         |             |             |        |       |
|       |  |      |      |       |      |      |                         |             |             |        |       |
| 3     | 10601.000  | 49.8 | +0.0 | +39.3 | +2.3 | +6.7 | +0.0                    | 41.1        | 54.0        | -12.9  | Vert  |
|       | M  |      | +2.1 | -59.1 | +0.0 |      |                         |             |             |        |       |
|       |  |      |      |       |      |      |                         |             |             |        |       |

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| 4 10550.000<br>M | 48.7 | +0.0<br>+2.1 | +39.3<br>-59.2 | +2.3<br>+0.0 | +6.7 | +0.0 | 39.9 | 54.0 | -14.1 | Vert  |
|------------------|------|--------------|----------------|--------------|------|------|------|------|-------|-------|
| 5 10600.000<br>M | 48.1 | +0.0<br>+2.1 | +39.3<br>-59.1 | +2.3<br>+0.0 | +6.7 | +0.0 | 39.4 | 54.0 | -14.6 | Vert  |
| 6 10650.140<br>M | 47.5 | +0.0<br>+2.1 | +39.3<br>-58.6 | +2.3<br>+0.0 | +6.7 | +0.0 | 39.3 | 54.0 | -14.7 | Horiz |

CKC Laboratories, Inc. Date: 5/29/2012 Time: 21:45:00 Digital Path WO#: 92682 15.407(b) / 15.209 Radiated Spurious Emissions Test Distance: 3 Meters Sequence#: 203 Vert UNII Bands. 20MHz Channel width.





Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • (510) 249 - 1170

Customer: **Digital Path** 

Specification: 15.407(b) / 15.209 Radiated Spurious Emissions

Work Order #:92682Date:6/1/2012Test Type:Radiated ScanTime:10:46:49Equipment:5GHz Panel (18dBi) + Omni (11dBi)Sequence#:206Manufacturer:Digital PathTested By:E. Wong

Model: G5RL10G S/N: EMI 2

## Test Equipment:

| 1 est Equi | pintenti |                   |                 |                  |              |
|------------|----------|-------------------|-----------------|------------------|--------------|
| ID         | Asset #  | Description       | Model           | Calibration Date | Cal Due Date |
| T1         | AN02668  | Spectrum Analyzer | E4446A          | 2/23/2011        | 2/23/2013    |
| T2         | AN02157  | Horn Antenna-ANSI | 3115            | 1/17/2011        | 1/17/2013    |
|            |          | C63.5             |                 |                  |              |
| T3         | AN03302  | Cable             | 32026-29094K-   | 3/21/2012        | 3/21/2014    |
|            |          |                   | 29094K-72TC     |                  |              |
| T4         | ANP01210 | Cable             | FSJ1P-50A-4A    | 3/15/2011        | 3/15/2013    |
| T5         | ANP05913 | Cable             | 32022-29094K-   | 8/30/2011        | 8/30/2013    |
|            |          |                   | 65TC            |                  |              |
| T6         | AN03114  | Preamp            | AMF-7D-         | 5/13/2011        | 5/13/2013    |
|            |          |                   | 00101800-30-10P |                  |              |
|            | ANP05935 | Attenuator        | 84A-10          | 10/19/2011       | 10/19/2013   |
|            | ANP01211 | Attenuator        | 23-10-34        | 4/15/2011        | 4/15/2013    |
| T7         | AN01417  | High Pass Filter  | 84300-80039     | 2/9/2012         | 2/9/2014     |
| T8         | AN02694  | Active Horn       | AMFW-5F-        | 11/10/2010       | 11/10/2012   |
|            |          | Antenna-ANSI      | 18002650-20-10P |                  |              |
|            |          | C63.5 Antenna     |                 |                  |              |
|            |          | Factors (dB)      |                 |                  |              |
|            | AN02695  | Active Horn       | AMFW-5F-        | 11/10/2010       | 11/10/2012   |
|            |          | Antenna-ANSI      | 260400-33-8P    |                  |              |
|            |          | C63.5 Antenna     |                 |                  |              |
|            |          | Factors (dB)      |                 |                  |              |
| T9         | ANP05911 | Cable             | 32022-29094K-   | 8/30/2011        | 8/30/2013    |
|            |          |                   | 65TC            |                  |              |
|            | AN00730  | Preamp            |                 | 1/31/2011        | 1/31/2013    |
|            | AN00432  | Loop Antenna      | 6502            | 3/31/2011        | 3/31/2013    |
|            | AN00852  | Biconilog Antenna | CBL 6111C       | 11/16/2010       | 11/16/2012   |
|            | ANP05299 | Cable             | RG214           | 3/6/2011         | 3/6/2013     |
|            | ANP05300 | Cable             | RG214/U         | 3/7/2011         | 3/7/2013     |
|            | ANP05440 | Cable             |                 | 3/7/2011         | 3/7/2013     |

## **Equipment Under Test (\* = EUT):**

| Function             | Manufacturer | Model # | S/N   |
|----------------------|--------------|---------|-------|
| 5GHz Panel (18dBi) + | Digital Path | G5RL10G | EMI 2 |
| Omni (11dBi)*        |              |         |       |

## Support Devices:

| Function            | Manufacturer | Model #       | S/N             |
|---------------------|--------------|---------------|-----------------|
| Laptop Computer     | HP           | ProBook 6565b | 5CB13637ZF      |
| Laptop Power Supply | HP           | 608428-002    | F12941126327228 |

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## Test Conditions / Notes:

The EUT installed on a pole as intended. DC power port is connected to a DC power supply via a CAT5 cable. The Ethernet port is connected to a remote laptop via unshielded twisted pair.

The Remote laptop is running test software to exercise the intended functionalities. Receiver circuit is activated.

11dBi Omni antenna is connected to radio 0 (instance 1) 18 dBi panel antenna is connected to radio1 (instance 2)

This data sheet is for the EUT transmitting via 11dBi Omni antenna connected to radio 0 (instance 1)

Freq: 5275MHz, 5300MHz, 5325MHz.

BW = 10 MHz

802.11a: 24Mbps, TX power setting= 17.5, 17.5, 17.5

802.11n: 13MCSHT20 2S,TX power setting= 17.5, 17.5, 17.5

Freq: 5280MHz, 5300MHz, 5320MHz.

BW = 20MHz

802.11a: 9 Mbps, TX power= 19, 19, 18

802.11n: 6.5MCS HT20 1S, TX power= 19, 19, 18

Temperature: 21.9°C, Relative Humidity: 38-43%, Atmospheric Pressure: 101.5kPa

Frequency range of measurement = 9kHz-40GHz.

9 kH -150 kHz; RBW=200 Hz, VBW=200 Hz;150 kHz-30 MHz; RBW=9 kHz, VBW=9 kHz;30 MHz-1000 MHz; RBW=120 kHz, VBW=120 kHz,1000 MHz-40,000 MHz; RBW=1 MHz, VBW=1 MHz.

Recorded emission level is below the EIRP limit of -27dBm/MHz (68.2dBuV/m @ 3 meter) IAW 789033 D01 General UNII Test Procedures V01r01

Ext Attn: 0 dB

| Measu | rement Data: | Re   | eading lis | ted by ma | argin. | Test Distance: 3 Meters |       |                |             |        |       |
|-------|--------------|------|------------|-----------|--------|-------------------------|-------|----------------|-------------|--------|-------|
| #     | Freq         | Rdng | T1         | T2        | T3     | T4                      | Dist  | Corr           | Spec        | Margin | Polar |
|       |              |      | T5         | T6        | T7     | T8                      |       |                |             |        |       |
|       |              |      | T9         |           |        |                         |       |                |             |        |       |
|       | MHz          | dΒμV | dB         | dB        | dB     | dB                      | Table | $dB\mu V/m \\$ | $dB\mu V/m$ | dB     | Ant   |
| 1     | 10595.200    | 56.6 | +0.0       | +39.3     | +2.3   | +6.7                    | +0.0  | 47.8           | 54.0        | -6.2   | Vert  |
|       | M            |      | +2.1       | -59.2     | +0.0   | +0.0                    |       |                |             |        |       |
|       |              |      | +0.0       |           |        |                         |       |                | 20MHz 80    | 2-11b- |       |
|       |              |      |            |           |        |                         |       |                | 6.5MCSH     | Γ201S  |       |
| 2     | 10569.600    | 54.9 | +0.0       | +39.3     | +2.3   | +6.7                    | +0.0  | 45.9           | 54.0        | -8.1   | Horiz |
|       | M            |      | +2.1       | -59.4     | +0.0   | +0.0                    |       |                |             |        |       |
|       |              |      | +0.0       |           |        |                         |       |                | 20MHz 80    | 2-11b- |       |
|       |              |      |            |           |        |                         |       |                | 6.5MCSH     | Γ201S  |       |
| 3     | 10551.900    | 53.0 | +0.0       | +39.3     | +2.3   | +6.7                    | +0.0  | 44.2           | 54.0        | -9.8   | Vert  |
|       | M            |      | +2.1       | -59.2     | +0.0   | +0.0                    |       |                |             |        |       |
|       |              |      | +0.0       |           |        |                         |       |                | 10MHz-80    | 2.11n  |       |
|       |              |      |            |           |        |                         |       |                | 13MCSHT     | 202S   |       |
| 4     | 10649.000    | 51.8 | +0.0       | +39.3     | +2.3   | +6.7                    | +0.0  | 43.6           | 54.0        | -10.4  | Horiz |
|       | M            |      | +2.1       | -58.6     | +0.0   | +0.0                    |       |                |             |        |       |
|       | Ave          |      | +0.0       |           |        |                         |       |                | 10MHz       |        |       |
|       |              |      |            |           |        |                         |       |                | 802.11a_24  | 4Mbps  |       |

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| ^  | 10640 000      | C 1 1 | .00            | +20.2          | .2.2           | 7             | .0.0   | 55.0              | 54 O                  | .1.0  | II     |
|----|----------------|-------|----------------|----------------|----------------|---------------|--------|-------------------|-----------------------|-------|--------|
| ^  | 10649.000<br>M | 64.1  | $+0.0 \\ +2.1$ | +39.3<br>-58.6 | $+2.3 \\ +0.0$ | +6.7<br>+0.0  | +0.0   | 55.9              | 54.0                  | +1.9  | Horiz  |
|    | 141            |       | +0.0           | 30.0           | 10.0           | 10.0          |        |                   | 10MHz                 |       |        |
|    |                |       |                |                |                |               |        |                   | 802.11a_24            | Mbps  |        |
| 6  | 10560.000      | 51.9  | +0.0           | +39.3          | +2.3           | +6.7          | +0.0   | 43.0              | 54.0                  | -11.0 | Vert   |
|    | M              |       | +2.1           | -59.3          | +0.0           | +0.0          |        |                   |                       |       |        |
|    |                |       | +0.0           |                |                |               |        |                   | 20MHz 802             |       |        |
|    | 10650 100      | 40.1  | .0.0           | . 20. 2        | . 2. 2         |               | . 0. 0 | 40.0              | 6.5MCSHT              |       | 77 '   |
| 1  | 10650.100<br>M | 49.1  | +0.0 +2.1      | +39.3<br>-58.6 | +2.3 +0.0      | +6.7          | +0.0   | 40.9              | 54.0                  | -13.1 | Horiz  |
|    | Ave            |       | +2.1<br>+0.0   | -38.0          | +0.0           | +0.0          |        |                   | 10MHz-802             | ) 11n |        |
|    | 7100           |       | 10.0           |                |                |               |        |                   | 13MCSHT               |       |        |
| ٨  | 10650.100      | 63.8  | +0.0           | +39.3          | +2.3           | +6.7          | +0.0   | 55.6              | 54.0                  | +1.6  | Horiz  |
|    | M              |       | +2.1           | -58.6          | +0.0           | +0.0          |        |                   |                       |       |        |
|    |                |       | +0.0           |                |                |               |        |                   | 10MHz-802             |       |        |
|    |                |       |                |                |                |               |        |                   | 13MCSHT               |       |        |
| 9  | 10641.150      | 48.1  | +0.0           | +39.3          | +2.3           | +6.7          | +0.0   | 39.8              | 54.0                  | -14.2 | Horiz  |
|    | M              |       | +2.1 +0.0      | -58.7          | +0.0           | +0.0          |        |                   | 20MHz 802             | 110   |        |
|    | Ave            |       | +0.0           |                |                |               |        |                   | 9Mbps                 | 2-11a |        |
| ٨  | 10641.150      | 60.8  | +0.0           | +39.3          | +2.3           | +6.7          | +0.0   | 52.5              | 54.0                  | -1.5  | Horiz  |
|    | M              |       | +2.1           | -58.7          | +0.0           | +0.0          |        |                   |                       |       |        |
|    |                |       | +0.0           |                |                |               |        |                   | 20MHz 802             | 2-11a |        |
|    |                |       |                |                |                |               |        |                   | 9Mbps                 |       |        |
| 11 | 15901.050      | 41.8  | +0.0           | +39.9          | +2.8           | +8.6          | +0.0   | 39.5              | 54.0                  | -14.5 | Horiz  |
|    | M              |       | +2.9           | -57.5          | +1.0           | +0.0          |        |                   | 10MHz                 |       |        |
|    | Ave            |       | +0.0           |                |                |               |        |                   | 802.11a_24            | Mhne  |        |
| ٨  | 15901.050      | 54.9  | +0.0           | +39.9          | +2.8           | +8.6          | +0.0   | 52.6              | 54.0                  | -1.4  | Horiz  |
|    | M              | 5 1.7 | +2.9           | -57.5          | +1.0           | +0.0          | 10.0   | 32.0              | 21.0                  | 1     | HOHE   |
|    |                |       | +0.0           |                |                |               |        |                   | 10MHz                 |       |        |
|    |                |       |                |                |                |               |        |                   | 802.11a_24            | Mbps  |        |
| 13 | 15824.700      | 41.4  | +0.0           | +40.1          | +2.8           | +8.5          | +0.0   | 39.3              | 54.0                  | -14.7 | Vert   |
|    | M              |       | +2.9           | -57.4          | +1.0           | +0.0          |        |                   | 101/11 00/            | N 11  |        |
|    | Ave            |       | +0.0           |                |                |               |        |                   | 10MHz-802<br>13MCSHT2 |       |        |
| ٨  | 15824.700      | 56.4  | +0.0           | +40.1          | +2.8           | +8.5          | +0.0   | 54.3              | 54.0                  | +0.3  | Vert   |
|    | M              | 50.4  |                | -57.4          | +1.0           | +0.0          | 10.0   | J <del>1</del> .J | 54.0                  | 10.5  | VCII   |
|    | -· <b>-</b>    |       | +0.0           | =              | . 2.0          | . 0.0         |        |                   | 10MHz-802             | 2.11n |        |
|    |                |       |                |                |                |               |        |                   | 13MCSHT               |       |        |
| 15 | 21098.000      | 50.2  | +0.0           | +0.0           | +0.0           | +0.0          | +0.0   | 39.2              | 54.0                  | -14.8 | Horiz  |
|    | M              |       | +0.0           | +0.0           | +0.0           | -15.1         |        |                   |                       |       |        |
|    | Ave            |       | +4.1           |                |                |               |        |                   | 10MHz 802             | 2.11a |        |
| ^  | 21098.000      | 61.7  | +0.0           | +0.0           | +0.0           | +0.0          | +0.0   | 50.7              | 24Mbps<br>54.0        | -3.3  | Horiz  |
|    | 21098.000<br>M | 01.7  | +0.0 +0.0      | +0.0 +0.0      | +0.0 +0.0      | +0.0<br>-15.1 | +0.0   | 50.7              | 54.0                  | -3.3  | 110112 |
|    | 111            |       | +4.1           | . 0.0          | 10.0           | 15.1          |        |                   | 10MHz 802             | 2.11a |        |
|    |                |       |                |                |                |               |        |                   | 24Mbps                |       |        |
| 17 | 15975.000      | 41.5  | +0.0           | +39.7          | +2.8           | +8.6          | +0.0   | 39.1              | 54.0                  | -14.9 | Vert   |
|    | M              |       | +2.8           | -57.4          | +1.1           | +0.0          |        |                   |                       |       |        |
|    | Ave            |       | +0.0           |                |                |               |        |                   | 10MHz-802             |       |        |
|    |                |       |                |                |                |               |        |                   | 13MCSHT               | 202S  |        |

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| ^ 15975.000       | 53.2 | +0.0         | +39.7          | +2.8           | +8.6           | +0.0 | 50.8 | 54.0                     | -3.2  | Vert       |
|-------------------|------|--------------|----------------|----------------|----------------|------|------|--------------------------|-------|------------|
| M                 |      | +2.8         | -57.4          | +1.1           | +0.0           |      |      | 101/11- 002 1            | 11    |            |
|                   |      | +0.0         |                |                |                |      |      | 10MHz-802.1<br>13MCSHT20 |       |            |
| 19 15824.100      | 41.1 | +0.0         | +40.1          | +2.8           | +8.5           | +0.0 | 39.0 | 54.0                     | -15.0 | Horiz      |
| M                 |      | +2.9         | -57.4          | +1.0           | +0.0           |      |      |                          |       |            |
| Ave               |      | +0.0         |                |                |                |      |      | 10MHz-802.1              |       |            |
|                   |      |              |                |                |                |      |      | 13MCSHT20                |       |            |
| ^ 15824.100       | 54.1 | +0.0         | +40.1          | +2.8           | +8.5           | +0.0 | 52.0 | 54.0                     | -2.0  | Horiz      |
| M                 |      | +2.9         | -57.4          | +1.0           | +0.0           |      |      | 101/11- 002 1            | 11    |            |
|                   |      | +0.0         |                |                |                |      |      | 10MHz-802.1<br>13MCSHT20 |       |            |
| 21 10560.000      | 47.8 | +0.0         | +39.3          | +2.3           | +6.7           | +0.0 | 38.9 |                          | -15.1 | Vert       |
| M                 | 47.0 | +2.1         | -59.3          | +0.0           | +0.0           | 10.0 | 30.7 | 34.0                     | 13.1  | VCIT       |
|                   |      | +0.0         |                |                |                |      |      | 20MHz 802-1              | 11a   |            |
|                   |      |              |                |                |                |      |      | 9Mbps                    |       |            |
| 22 15900.500      | 41.2 | +0.0         | +39.9          | +2.8           | +8.6           | +0.0 | 38.9 | 54.0                     | -15.1 | Vert       |
| M                 |      | +2.9         | -57.5          | +1.0           | +0.0           |      |      |                          |       |            |
| Ave               |      | +0.0         |                |                |                |      |      | 10MHz-802.1              |       |            |
| A 15000 500       | 517  | .00          | . 20.0         | .2.0           | .0.6           | .0.0 | 50.4 | 13MCSHT20                |       | <b>X</b> 7 |
| ^ 15900.500<br>M  | 54.7 | +0.0<br>+2.9 | +39.9<br>-57.5 | $+2.8 \\ +1.0$ | $+8.6 \\ +0.0$ | +0.0 | 52.4 | 54.0                     | -1.6  | Vert       |
| IVI               |      | +0.0         | -37.3          | +1.0           | +0.0           |      |      | 10MHz-802.1              | l 1n  |            |
|                   |      | 10.0         |                |                |                |      |      | 13MCSHT20                |       |            |
| 24 15898.100      | 41.1 | +0.0         | +39.9          | +2.8           | +8.6           | +0.0 | 38.8 | 54.0                     | -15.2 | Horiz      |
| M                 |      | +2.9         | -57.5          | +1.0           | +0.0           |      |      |                          |       |            |
| Ave               |      | +0.0         |                |                |                |      |      | 10MHz-802.1              |       |            |
|                   |      |              |                |                |                |      |      | 13MCSHT20                |       |            |
| ^ 15898.100       | 54.2 | +0.0         | +39.9          | +2.8           | +8.6           | +0.0 | 51.9 | 54.0                     | -2.1  | Horiz      |
| M                 |      | +2.9         | -57.5          | +1.0           | +0.0           |      |      | 101/11 002 1             | 11    |            |
|                   |      | +0.0         |                |                |                |      |      | 10MHz-802.1<br>13MCSHT20 |       |            |
| 26 15960.000      | 41.1 | +0.0         | +39.7          | +2.8           | +8.6           | +0.0 | 38.7 |                          | -15.3 | Horiz      |
| M                 | 71.1 | +2.8         | -57.4          | +1.1           | +0.0           | 10.0 | 30.7 | 34.0                     | -13.3 | HOHZ       |
| Ave               |      | +0.0         | 07             |                | . 0.0          |      |      | 20MHz 802-1              | 11b-  |            |
|                   |      |              |                |                |                |      |      | 6.5MCSHT20               | 01S   |            |
| ^ 15960.000       | 53.9 | +0.0         | +39.7          | +2.8           | +8.6           | +0.0 | 51.5 | 54.0                     | -2.5  | Horiz      |
| M                 |      |              | -57.4          | +1.1           | +0.0           |      |      |                          |       |            |
|                   |      | +0.0         |                |                |                |      |      | 20MHz 802-1              |       |            |
| 20 15040 000      | 40.7 |              | + 40 1         | . 2.0          | , 0 =          | 100  | 20 5 | 6.5MCSHT20               |       | V          |
| 28 15840.000<br>M | 40.7 | +0.0 +2.9    | +40.1<br>-57.5 | +2.8 +1.0      | $+8.5 \\ +0.0$ | +0.0 | 38.5 | 54.0                     | -15.5 | Vert       |
| Ave               |      | +2.9         | -51.5          | +1.0           | +0.0           |      |      | 20MHz 802-1              | 11h-  |            |
| 7110              |      | 10.0         |                |                |                |      |      | 6.5MCSHT20               |       |            |
| ^ 15840.000       | 54.1 | +0.0         | +40.1          | +2.8           | +8.5           | +0.0 | 51.9 | 54.0                     | -2.1  | Vert       |
| M                 |      | +2.9         | -57.5          | +1.0           | +0.0           |      |      |                          |       |            |
|                   |      | +0.0         |                |                |                |      |      | 20MHz 802-1              |       |            |
|                   |      |              |                |                |                |      |      | 6.5MCSHT20               |       |            |
| 30 15974.600      | 40.7 | +0.0         | +39.7          | +2.8           | +8.6           | +0.0 | 38.3 | 54.0                     | -15.7 | Horiz      |
| M                 |      | +2.8         | -57.4          | +1.1           | +0.0           |      |      | 101/11                   |       |            |
| Ave               |      | +0.0         |                |                |                |      |      | 10MHz<br>802.11a_24M     | [hnc  |            |
|                   |      |              |                |                |                |      |      | 0U2.11a_24M              | rops  |            |

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| 31 | 15900.000      | 40.4         | +0.0           | +39.9          | +2.8         | +8.6         | +0.0 | 38.1 | 54.0               | -15.9         | Horiz    |
|----|----------------|--------------|----------------|----------------|--------------|--------------|------|------|--------------------|---------------|----------|
| 31 | M              | 40.4         | +2.9           | -57.5          | +1.0         | +0.0         | +0.0 | 30.1 | 34.0               | -13.9         | 110112   |
|    | Ave            |              | +0.0           | - ,            |              |              |      |      | 20MHz 802          | 2-11a         |          |
|    |                |              |                |                |              |              |      |      | 9Mbps              |               |          |
| ^  | 15900.000      | 53.8         | +0.0           | +39.9          | +2.8         | +8.6         | +0.0 | 51.5 | 54.0               | -2.5          | Horiz    |
|    | M              |              | +2.9           | -57.5          | +1.0         | +0.0         |      |      |                    |               |          |
|    |                |              | +0.0           |                |              |              |      |      | 20MHz 802          | 2-11a         |          |
| 33 | 10600.700      | 46.6         | +0.0           | +39.3          | +2.3         | +6.7         | +0.0 | 37.9 | 9Mbps<br>54.0      | -16.1         | Horiz    |
| 33 | M              | 40.0         | +2.1           | -59.1          | +0.0         | +0.7         | +0.0 | 31.9 | 34.0               | -10.1         | HOHZ     |
|    | Ave            |              | +0.0           | 57.1           | 10.0         | 10.0         |      |      | 10MHz              |               |          |
|    |                |              |                |                |              |              |      |      | 802.11a_24         | 4Mbps         |          |
| ^  | 10000.700      | 58.9         | +0.0           | +39.3          | +2.3         | +6.7         | +0.0 | 50.2 | 54.0               | -3.8          | Horiz    |
|    | M              |              | +2.1           | -59.1          | +0.0         | +0.0         |      |      |                    |               |          |
|    |                |              | +0.0           |                |              |              |      |      | 10MHz              | () /()        |          |
| 35 | 15974.600      | 40.3         | +0.0           | +39.7          | +2.8         | +8.6         | +0.0 | 37.9 | 802.11a_24<br>54.0 | -16.1         | Horiz    |
|    | 13974.000<br>M | +0.3         | +2.8           | +39.7<br>-57.4 | +2.8         | +0.0         | 10.0 | 31.7 | J+.U               | -10.1         | 1 101 1Z |
|    | Ave            |              | +0.0           | 37.1           |              | 10.0         |      |      | 10MHz-80           | 2.11n         |          |
|    |                |              |                |                |              |              |      |      | 13MCSHT            | 202S          |          |
| ^  | 15974.600      | 54.1         | +0.0           | +39.7          | +2.8         | +8.6         | +0.0 | 51.7 | 54.0               | -2.3          | Horiz    |
|    | M              |              | +2.8           | -57.4          | +1.1         | +0.0         |      |      |                    |               |          |
|    |                |              | +0.0           |                |              |              |      |      | 10MHz              | () /()        |          |
|    | 15974.600      | 52.7         | +0.0           | +39.7          | +2.8         | +8.6         | +0.0 | 50.3 | 802.11a_24<br>54.0 | -3.7          | Horiz    |
|    | 13974.000<br>M | 32.1         | $+0.0 \\ +2.8$ | +39.7<br>-57.4 | +2.8<br>+1.1 | +0.0         | +0.0 | 30.3 | 34.0               | -3.7          | HOLIZ    |
|    | 171            |              | +0.0           | 37.1           | 1 1.1        | 10.0         |      |      | 10MHz-80           | 2.11n         |          |
|    |                |              |                |                |              |              |      |      | 13MCSHT            |               |          |
| 38 | 10649.600      | 45.3         | +0.0           | +39.3          | +2.3         | +6.7         | +0.0 | 37.1 | 54.0               | -16.9         | Vert     |
|    | M              |              | +2.1           | -58.6          | +0.0         | +0.0         |      |      |                    |               |          |
|    | Ave            |              | +0.0           |                |              |              |      |      | 10MHz              | (3.41         |          |
|    | 10649.600      | 57.5         | +0.0           | +39.3          | +2.3         | +6.7         | +0.0 | 49.3 | 802.11a_24<br>54.0 | +Mbps<br>-4.7 | Vert     |
|    | 10049.000<br>M | 37.3         | +2.1           | +39.3<br>-58.6 | +2.3         | +0.7         | +0.0 | 49.3 | 34.0               | -4./          | vert     |
|    | 171            |              | +0.0           | 50.0           | 10.0         | 10.0         |      |      | 10MHz              |               |          |
|    |                |              |                |                |              |              |      |      | 802.11a_24         | 4Mbps         |          |
| 40 | 10640.000      | 45.2         | +0.0           | +39.3          | +2.3         | +6.7         | +0.0 | 36.9 | 54.0               | -17.1         | Vert     |
|    | M              |              | +2.1           | -58.7          | +0.0         | +0.0         |      |      |                    |               |          |
|    | Ave            |              | +0.0           |                |              |              |      |      | 20MHz 802          |               |          |
| ^  | 10640.000      | 50.2         | +0.0           | 120.2          | 12.2         | 167          | +ΩΩ  | 51.0 | 6.5MCSHT           |               | Vert     |
|    | 10640.000<br>M | 59.3         | +0.0 $+2.1$    | +39.3<br>-58.7 | +2.3<br>+0.0 | +6.7<br>+0.0 | +0.0 | 51.0 | 54.0               | -3.0          | vert     |
|    | 141            |              | +0.0           | 50.7           | 10.0         | 10.0         |      |      | 20MHz 802          | 2-11b-        |          |
|    |                |              | . 3.0          |                |              |              |      |      | 6.5MCSHT           |               |          |
| 42 | 10640.000      | 45.1         | +0.0           | +39.3          | +2.3         | +6.7         | +0.0 | 36.8 | 54.0               | -17.2         | Horiz    |
|    | M              |              | +2.1           | -58.7          | +0.0         | +0.0         |      |      |                    |               |          |
|    | Ave            |              | +0.0           |                |              |              |      |      | 20MHz 802          |               |          |
|    | 10640 000      | <b>5</b> 0.6 | .00            | 120.2          | .2.2         |              | .0.0 | 50.2 | 6.5MCSHT           |               | II.      |
| ^  | 10640.000<br>M | 58.6         | +0.0 $+2.1$    | +39.3<br>-58.7 | +2.3<br>+0.0 | +6.7<br>+0.0 | +0.0 | 50.3 | 54.0               | -3.7          | Horiz    |
|    | 1 <b>V1</b>    |              | +2.1<br>+0.0   | -30.1          | +0.0         | +0.0         |      |      | 20MHz 802          | 2-11b-        |          |
|    |                |              | . 0.0          |                |              |              |      |      | 6.5MCSHT           |               |          |
|    |                |              |                |                |              |              |      |      | 6.5MCSHT           | 1201S         |          |

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| 44 10650.000      | 45.0 | +0.0         | +39.3          | +2.3           | +6.7         | +0.0   | 36.8 | 54.0                | -17.2  | Vert   |
|-------------------|------|--------------|----------------|----------------|--------------|--------|------|---------------------|--------|--------|
| M                 |      | +2.1<br>+0.0 | -58.6          | +0.0           | +0.0         |        |      | 101/11- 90          | 0.11.  |        |
| Ave               |      | +0.0         |                |                |              |        |      | 10MHz-80<br>13MCSHT |        |        |
| ^ 10650.000       | 59.5 | +0.0         | +39.3          | +2.3           | +6.7         | +0.0   | 51.3 | 54.0                | -2.7   | Vert   |
| M                 | 39.3 | +2.1         | -58.6          | +0.0           | +0.7         | +0.0   | 31.3 | 34.0                | -2.1   | VCIT   |
| 171               |      | +0.0         | 30.0           | 10.0           | 10.0         |        |      | 10MHz-80            | 2.11n  |        |
|                   |      |              |                |                |              |        |      | 13MCSHT             |        |        |
| 46 10638.700      | 44.8 | +0.0         | +39.3          | +2.3           | +6.7         | +0.0   | 36.5 | 54.0                | -17.5  | Vert   |
| M                 |      | +2.1         | -58.7          | +0.0           | +0.0         |        |      |                     |        |        |
| Ave               |      | +0.0         |                |                |              |        |      | 20MHz 80            | 2-11a  |        |
|                   |      |              |                |                |              |        |      | 9Mbps               |        |        |
| ^ 10638.700       | 57.3 | +0.0         | +39.3          | +2.3           | +6.7         | +0.0   | 49.0 | 54.0                | -5.0   | Vert   |
| M                 |      | +2.1         | -58.7          | +0.0           | +0.0         |        |      | 20144 00            |        |        |
|                   |      | +0.0         |                |                |              |        |      | 20MHz 80            | 2-11a  |        |
| 40 10600 000      | 45 1 | .00          | . 20. 2        | .2.2           | 7            | . 0. 0 | 26.4 | 9Mbps               | 17.6   | TT     |
| 48 10600.000<br>M | 45.1 | +0.0<br>+2.1 | +39.3<br>-59.1 | $+2.3 \\ +0.0$ | +6.7<br>+0.0 | +0.0   | 36.4 | 54.0                | -17.6  | Horiz  |
| Ave               |      | +2.1<br>+0.0 | -39.1          | +0.0           | +0.0         |        |      | 20MHz 80            | 2 110  |        |
| Ave               |      | +0.0         |                |                |              |        |      | 9Mbps               | 2-11a  |        |
| 49 10600.000      | 44.9 | +0.0         | +39.3          | +2.3           | +6.7         | +0.0   | 36.2 | 54.0                | -17.8  | Horiz  |
| 49 10000.000<br>M | 77.7 | +2.1         | -59.1          | +0.0           | +0.0         | 10.0   | 30.2 | 34.0                | 17.0   | HOHZ   |
| Ave               |      | +0.0         | 0,,1           |                | . 0.0        |        |      | 20MHz 80            | 2-11b- |        |
|                   |      |              |                |                |              |        |      | 6.5MCSH             |        |        |
| ^ 10600.000       | 59.3 | +0.0         | +39.3          | +2.3           | +6.7         | +0.0   | 50.6 | 54.0                | -3.4   | Horiz  |
| M                 |      | +2.1         | -59.1          | +0.0           | +0.0         |        |      |                     |        |        |
|                   |      | +0.0         |                |                |              |        |      | 20MHz 80            |        |        |
|                   |      |              |                |                |              |        |      | 6.5MCSH             |        |        |
| ^ 10600.000       | 58.2 | +0.0         | +39.3          | +2.3           | +6.7         | +0.0   | 49.5 | 54.0                | -4.5   | Horiz  |
| M                 |      | +2.1         | -59.1          | +0.0           | +0.0         |        |      | 20141 00            | 2 11   |        |
|                   |      | +0.0         |                |                |              |        |      | 20MHz 80            | 2-11a  |        |
| 52 15823.100      | 38.0 | +0.0         | +40.1          | +2.8           | +8.5         | +0.0   | 35.9 | 9Mbps<br>54.0       | -18.1  | Horiz  |
| 32 13823.100<br>M | 36.0 | +0.0<br>+2.9 | +40.1<br>-57.4 | +2.8<br>+1.0   | +0.0         | +0.0   | 33.9 | 34.0                | -16.1  | HOHZ   |
| Ave               |      | +0.0         | -37.4          | +1.0           | +0.0         |        |      | 10MHz               |        |        |
| Tive              |      | 10.0         |                |                |              |        |      | 802.11a_24          | 4Mbps  |        |
| ^ 15823.100       | 50.6 | +0.0         | +40.1          | +2.8           | +8.5         | +0.0   | 48.5 | 54.0                | -5.5   | Horiz  |
| M                 | 20.0 | +2.9         | -57.4          | +1.0           | +0.0         |        |      | 2                   | 0.0    | 110112 |
|                   |      | +0.0         |                |                |              |        |      | 10MHz               |        |        |
|                   |      |              |                |                |              |        |      | 802.11a_24          | 4Mbps  |        |
| 54 10596.800      | 44.5 | +0.0         | +39.3          | +2.3           | +6.7         | +0.0   | 35.7 | 54.0                | -18.3  | Horiz  |
| M                 |      | +2.1         | -59.2          | +0.0           | +0.0         |        |      |                     |        |        |
| Ave               |      | +0.0         |                |                |              |        |      | 10MHz-80            |        |        |
|                   |      |              |                |                |              |        |      | 13MCSHT             |        |        |
| ^ 10596.800       | 57.2 | +0.0         | +39.3          | +2.3           | +6.7         | +0.0   | 48.4 | 54.0                | -5.6   | Horiz  |
| M                 |      | +2.1         | -59.2          | +0.0           | +0.0         |        |      | 101/11 00           | 0.11.  |        |
|                   |      | +0.0         |                |                |              |        |      | 10MHz-80            |        |        |
| 56 10600.000      | 44 1 | +0.0         | 120.2          | 12.2           | 167          | +0.0   | 25 / | 13MCSHT             |        | Vant   |
| 56 10600.000<br>M | 44.1 | +0.0 +2.1    | +39.3<br>-59.1 | $+2.3 \\ +0.0$ | +6.7<br>+0.0 | +0.0   | 35.4 | 54.0                | -18.6  | Vert   |
| Ave               |      | +2.1         | -39.1          | +0.0           | +0.0         |        |      | 10MHz               |        |        |
| 1100              |      | 10.0         |                |                |              |        |      | 802.11a_24          | 4Mbps  |        |
|                   |      |              |                |                |              |        |      | 502.11a_2           | intops |        |

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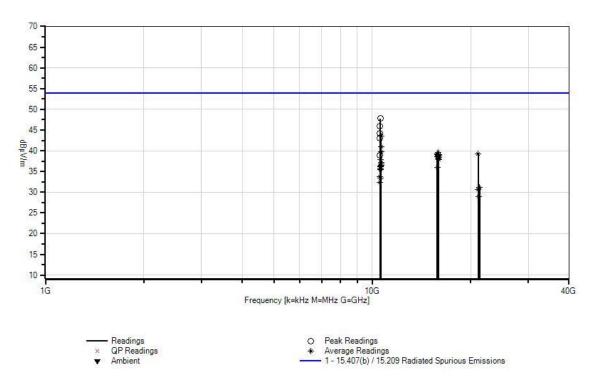
| ٨  | 10600.000      | 57.2 | +0.0           | +39.3          | +2.3      | +6.7              | +0.0 | 48.5 | 54.0                 | -5.5         | Vert  |
|----|----------------|------|----------------|----------------|-----------|-------------------|------|------|----------------------|--------------|-------|
|    | M              |      | +2.1 +0.0      | -59.1          | +0.0      | +0.0              |      |      | 10MHz                |              |       |
|    |                |      | +0.0           |                |           |                   |      |      | 802.11a_24M          | <b>I</b> hne |       |
| ٨  | 10600.000      | 54.1 | +0.0           | +39.3          | +2.3      | +6.7              | +0.0 | 45.4 | 54.0                 | -8.6         | Vert  |
|    | M              | 31.1 | +2.1           | -59.1          | +0.0      | +0.0              | 10.0 | 13.1 | 51.0                 | 0.0          | VOIC  |
|    | -1-2           |      | +0.0           | 0,11           |           | . 0.0             |      |      | 20MHz 802-1          | 11a          |       |
|    |                |      |                |                |           |                   |      |      | 9Mbps                |              |       |
| 59 | 10549.500      | 42.6 | +0.0           | +39.3          | +2.3      | +6.7              | +0.0 | 33.8 | 54.0                 | -20.2        | Horiz |
|    | M              |      | +2.1           | -59.2          | +0.0      | +0.0              |      |      |                      |              |       |
|    | Ave            |      | +0.0           |                |           |                   |      |      | 10MHz                |              |       |
|    | 10710 700      |      |                |                |           |                   |      |      | 802.11a_24M          |              |       |
| ^  | 10549.500      | 54.5 | +0.0           | +39.3          | +2.3      | +6.7              | +0.0 | 45.7 | 54.0                 | -8.3         | Horiz |
|    | M              |      | +2.1           | -59.2          | +0.0      | +0.0              |      |      | 10MH-                |              |       |
|    |                |      | +0.0           |                |           |                   |      |      | 10MHz<br>802.11a_24M | (hpc         |       |
| 61 | 10549.400      | 42.5 | +0.0           | +39.3          | +2.3      | +6.7              | +0.0 | 33.7 | 54.0                 | -20.3        | Horiz |
| 01 | M              | 72.3 | +2.1           | -59.2          | +0.0      | +0.0              | 10.0 | 33.1 | 54.0                 | 20.5         | HOHZ  |
|    | Ave            |      | +0.0           | 37.2           | 10.0      | 10.0              |      |      | 10MHz-802.           | 11n          |       |
|    |                |      |                |                |           |                   |      |      | 13MCSHT20            |              |       |
| ^  | 10549.400      | 56.6 | +0.0           | +39.3          | +2.3      | +6.7              | +0.0 | 47.8 | 54.0                 | -6.2         | Horiz |
|    | M              |      | +2.1           | -59.2          | +0.0      | +0.0              |      |      |                      |              |       |
|    |                |      | +0.0           |                |           |                   |      |      | 10MHz-802.           |              |       |
|    |                |      |                |                |           |                   |      |      | 13MCSHT20            |              |       |
| 63 | 10600.500      | 42.1 | +0.0           | +39.3          | +2.3      | +6.7              | +0.0 | 33.4 | 54.0                 | -20.6        | Vert  |
|    | M              |      | +2.1           | -59.1          | +0.0      | +0.0              |      |      | 103411 002           | 1.1          |       |
|    | Ave            |      | +0.0           |                |           |                   |      |      | 10MHz-802.           |              |       |
| ^  | 10600.500      | 57.4 | +0.0           | +39.3          | +2.3      | +6.7              | +0.0 | 48.7 | 13MCSHT20<br>54.0    | -5.3         | Vert  |
|    | M              | 31.4 | +2.1           | +39.3<br>-59.1 | +0.0      | +0.7              | +0.0 | 40.7 | 34.0                 | -5.5         | Vert  |
|    | 141            |      | +0.0           | 37.1           | 10.0      | 10.0              |      |      | 10MHz-802.           | 11n          |       |
|    |                |      | . 0.0          |                |           |                   |      |      | 13MCSHT20            |              |       |
| 65 | 10548.250      | 41.1 | +0.0           | +39.3          | +2.3      | +6.7              | +0.0 | 32.3 | 54.0                 | -21.7        | Vert  |
|    | M              |      | +2.1           | -59.2          | +0.0      | +0.0              |      |      |                      |              |       |
|    | Ave            |      | +0.0           |                |           |                   |      |      | 10MHz                |              |       |
|    |                |      |                |                |           |                   |      |      | 802.11a_24M          |              |       |
| ٨  | 10548.250      | 54.4 | +0.0           | +39.3          | +2.3      | +6.7              | +0.0 | 45.6 | 54.0                 | -8.4         | Vert  |
|    | M              |      | +2.1           | -59.2          | +0.0      | +0.0              |      |      | 103/477              |              |       |
|    |                |      | +0.0           |                |           |                   |      |      | 10MHz                | The          |       |
| 67 | 21200 000      | 42.4 | 10.0           | +ΩΩ            | ΙΩΩ       | +ΩΩ               | +0.0 | 21.2 | 802.11a_24M          |              | Horiz |
| 0/ | 21300.000<br>M | 42.4 | $+0.0 \\ +0.0$ | $+0.0 \\ +0.0$ | +0.0 +0.0 | +0.0<br>-15.4     | +0.0 | 31.2 | 54.0                 | -22.8        | HOHZ  |
|    | Ave            |      | +4.2           | 10.0           | 10.0      | -1J. <del>4</del> |      |      | 10MHz 802.1          | l 1a 24      |       |
|    |                |      | . 1.2          |                |           |                   |      |      | Mbps                 | . 1 w 2 T    |       |
| ٨  | 21300.000      | 55.3 | +0.0           | +0.0           | +0.0      | +0.0              | +0.0 | 44.1 | 54.0                 | -9.9         | Horiz |
|    | M              |      | +0.0           | +0.0           | +0.0      | -15.4             |      |      |                      |              |       |
|    |                |      | +4.2           |                |           |                   |      |      | 10MHz 802.1          | 11a 24       |       |
|    |                |      |                |                |           |                   |      |      | Mbps                 |              |       |
| 69 | 21098.000      | 41.7 | +0.0           | +0.0           | +0.0      | +0.0              | +0.0 | 30.7 | 54.0                 | -23.3        | Vert  |
|    | M              |      | +0.0           | +0.0           | +0.0      | -15.1             |      |      | 403.077 005          |              |       |
|    | Ave            |      | +4.1           |                |           |                   |      |      | 10MHz 802.1          | 11a          |       |
|    |                |      |                |                |           |                   |      |      | 24Mbps               |              |       |

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| ^ 21098.000  | 54.1 | +0.0 | +0.0 | +0.0 | +0.0  | +0.0 | 43.1 | 54.0     | -10.9 | Vert  |
|--------------|------|------|------|------|-------|------|------|----------|-------|-------|
| M            |      | +0.0 | +0.0 | +0.0 | -15.1 |      |      |          |       |       |
|              |      | +4.1 |      |      |       |      |      | 10MHz 80 | 2.11a |       |
|              |      |      |      |      |       |      |      | 24Mbps   |       |       |
| 71 21200.000 | 40.0 | +0.0 | +0.0 | +0.0 | +0.0  | +0.0 | 28.9 | 54.0     | -25.1 | Horiz |
| M            |      | +0.0 | +0.0 | +0.0 | -15.3 |      |      |          |       |       |
| Ave          |      | +4.2 |      |      |       |      |      | 10MHz 80 | 2.11a |       |
|              |      |      |      |      |       |      |      | 24Mbps   |       |       |
| ^ 21200.000  | 52.7 | +0.0 | +0.0 | +0.0 | +0.0  | +0.0 | 41.6 | 54.0     | -12.4 | Horiz |
| M            |      | +0.0 | +0.0 | +0.0 | -15.3 |      |      |          |       |       |
|              |      | +4.2 |      |      |       |      |      | 10MHz 80 | 2.11a |       |
|              |      |      |      |      |       |      |      | 24Mbps   |       |       |

CKC Laboratories, Inc. Date: 6/1/2012 Time: 10:46:49 Digital Path WO#: 92682 15.407(b) / 15.209 Radiated Spurious Emissions Test Distance: 3 Meters Sequence#: 206 Vert UNII Bands. 20MHz Channel width.





Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • (510) 249 - 1170

Customer: **Digital Path** 

Specification: 15.407(b) / 15.209 Radiated Spurious Emissions

Work Order #:92682Date:6/1/2012Test Type:Radiated ScanTime:19:25:21Equipment:5GHz Panel (18dBi) + Omni (11dBi)Sequence#:209Manufacturer:Digital PathTested By:E. Wong

Model: G5RL10G S/N: EMI 2

## Test Equipment:

| 1 cst Lqui | Piliteritt |                   |                 |                  |              |
|------------|------------|-------------------|-----------------|------------------|--------------|
| ID         | Asset #    | Description       | Model           | Calibration Date | Cal Due Date |
| T1         | AN02668    | Spectrum Analyzer | E4446A          | 2/23/2011        | 2/23/2013    |
| T2         | AN02157    | Horn Antenna-ANSI | 3115            | 1/17/2011        | 1/17/2013    |
|            |            | C63.5             |                 |                  |              |
| T3         | AN03302    | Cable             | 32026-29094K-   | 3/21/2012        | 3/21/2014    |
|            |            |                   | 29094K-72TC     |                  |              |
| T4         | ANP01210   | Cable             | FSJ1P-50A-4A    | 3/15/2011        | 3/15/2013    |
| T5         | ANP05913   | Cable             | 32022-29094K-   | 8/30/2011        | 8/30/2013    |
|            |            |                   | 65TC            |                  |              |
| T6         | AN03114    | Preamp            | AMF-7D-         | 5/13/2011        | 5/13/2013    |
|            |            |                   | 00101800-30-10P |                  |              |
|            | ANP05935   | Attenuator        | 84A-10          | 10/19/2011       | 10/19/2013   |
|            | ANP01211   | Attenuator        | 23-10-34        | 4/15/2011        | 4/15/2013    |
| T7         | AN01417    | High Pass Filter  | 84300-80039     | 2/9/2012         | 2/9/2014     |
|            | AN02694    | Active Horn       | AMFW-5F-        | 11/10/2010       | 11/10/2012   |
|            |            | Antenna-ANSI      | 18002650-20-10P | 1                |              |
|            |            | C63.5 Antenna     |                 |                  |              |
|            |            | Factors (dB)      |                 |                  |              |
|            | AN02695    | Active Horn       | AMFW-5F-        | 11/10/2010       | 11/10/2012   |
|            |            | Antenna-ANSI      | 260400-33-8P    |                  |              |
|            |            | C63.5 Antenna     |                 |                  |              |
|            |            | Factors (dB)      |                 |                  |              |
|            | ANP05911   | Cable             | 32022-29094K-   | 8/30/2011        | 8/30/2013    |
|            |            |                   | 65TC            |                  |              |
|            | AN00730    | Preamp            |                 | 1/31/2011        | 1/31/2013    |
|            | AN00432    | Loop Antenna      | 6502            | 3/31/2011        | 3/31/2013    |
|            | AN00852    | Biconilog Antenna | CBL 6111C       | 11/16/2010       | 11/16/2012   |
|            | ANP05299   | Cable             | RG214           | 3/6/2011         | 3/6/2013     |
|            | ANP05300   | Cable             | RG214/U         | 3/7/2011         | 3/7/2013     |
|            | ANP05440   | Cable             |                 | 3/7/2011         | 3/7/2013     |

# Equipment Under Test (\* = EUT):

| Function             | Manufacturer | Model # | S/N   |
|----------------------|--------------|---------|-------|
| 5GHz Panel (18dBi) + | Digital Path | G5RL10G | EMI 2 |
| Omni (11dBi)*        |              |         |       |

## Support Devices:

| Function            | Manufacturer | Model #       | S/N             |
|---------------------|--------------|---------------|-----------------|
| Laptop Computer     | HP           | ProBook 6565b | 5CB13637ZF      |
| Laptop Power Supply | HP           | 608428-002    | F12941126327228 |

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#### Test Conditions / Notes:

The EUT installed on a pole as intended. DC power port is connected to a DC power supply via a CAT5 cable. The Ethernet port is connected to a remote laptop via unshielded twisted pair.

The Remote laptop is running test software to exercise the intended functionalities. Receiver circuit is activated.

11dBi Omni antenna is connected to radio 0 (instance 1) 18 dBi panel antenna is connected to radio1 (instance 2)

This data sheet is for the EUT transmitting via 18dBi Panel antenna connected to radio 1 (instance 2)

5250-5350HHz

Freq: 5275MHz, 5300MHz, 5325MHz.

BW = 10 MHz

802.11a: 24Mbps, TX power setting= 10.,10.,10 802.11n: 13MCSHT20 2S,TX power setting= 10.,10.,10

Freq: 5280MHz, 5300MHz, 5320MHz.

BW = 20MHz

802.11a: 9 Mbps, TX power setting 12.5,12.5,12.5

802.11n: 6.5MCS HT20 1S, TX power setting= 12.5,12.5,12.5

Temperature: 21.9°C, Relative Humidity: 38-43%, Atmospheric Pressure: 101.5kPa

No emission found. Detection was performed with reduced resolution bandwidth, recorded data represent noise floor level at required BW.

Frequency range of measurement = 9kHz-40GHz.

9 kH -150 kHz; RBW=200 Hz, VBW=200 Hz;150 kHz-30 MHz; RBW=9 kHz, VBW=9 kHz;30 MHz-1000 MHz; RBW=120 kHz, VBW=120 kHz,1000 MHz-40,000 MHz; RBW=1 MHz, VBW=1 MHz.

Recorded emission level is below the EIRP limit of -27dBm/MHz (68.2dBuV/m @ 3 meter) IAW 789033 D01 General UNII Test Procedures V01r01

Ext Attn: 0 dB

| Me | asu | rement Data: | Re   | eading lis | ted by ma | argin. |      | Τe    | est Distance | e: 3 Meters |        |       |
|----|-----|--------------|------|------------|-----------|--------|------|-------|--------------|-------------|--------|-------|
| #  | ‡   | Freq         | Rdng | T1         | T2        | T3     | T4   | Dist  | Corr         | Spec        | Margin | Polar |
|    |     |              |      | T5         | T6        | T7     |      |       |              |             |        |       |
|    |     | MHz          | dΒμV | dB         | dB        | dB     | dB   | Table | $dB\mu V/m$  | $dB\mu V/m$ | dB     | Ant   |
|    | 1   | 10640.000    | 52.2 | +0.0       | +39.3     | +2.3   | +6.7 | +0.0  | 43.9         | 54.0        | -10.1  | Horiz |
|    |     | M            |      | +2.1       | -58.7     | +0.0   |      |       |              |             |        |       |
|    |     |              |      |            |           |        |      |       |              |             |        |       |
|    | 2   | 10650.000    | 51.6 | +0.0       | +39.3     | +2.3   | +6.7 | +0.0  | 43.4         | 54.0        | -10.6  | Horiz |
|    |     | M            |      | +2.1       | -58.6     | +0.0   |      |       |              |             |        |       |
|    |     |              |      |            |           |        |      |       |              |             |        |       |
|    | 3   | 10600.000    | 51.7 | +0.0       | +39.3     | +2.3   | +6.7 | +0.0  | 43.0         | 54.0        | -11.0  | Horiz |
|    |     | M            |      | +2.1       | -59.1     | +0.0   |      |       |              |             |        |       |
|    |     |              |      |            |           |        |      |       |              |             |        |       |
|    | 4   | 10600.000    | 51.3 | +0.0       | +39.3     | +2.3   | +6.7 | +0.0  | 42.6         | 54.0        | -11.4  | Vert  |
|    |     | M            |      | +2.1       | -59.1     | +0.0   |      |       |              |             |        |       |
|    |     |              |      |            |           |        |      |       |              |             |        |       |

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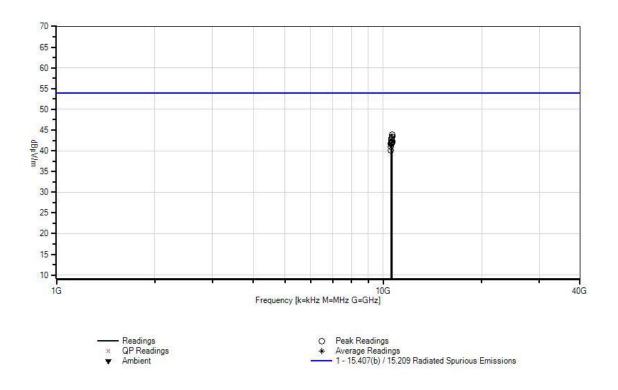


| 5  | 10650.000 | 50.5 | +0.0   | +39.3   | +2.3   | +6.7 | +0.0   | 42.3 | 54.0     | -11.7 | Vert  |
|----|-----------|------|--------|---------|--------|------|--------|------|----------|-------|-------|
|    | M         |      | +2.1   | -58.6   | +0.0   |      |        |      |          |       |       |
|    |           |      |        |         |        |      |        |      |          |       |       |
| 6  | 10640.000 | 50.3 | +0.0   | +39.3   | +2.3   | +6.7 | +0.0   | 42.0 | 54.0     | -12.0 | Vert  |
|    |           | 30.3 |        |         |        | +0.7 | +0.0   | 42.0 | 34.0     | -12.0 | VCIT  |
|    | M         |      | +2.1   | -58.7   | +0.0   |      |        |      |          |       |       |
|    |           |      |        |         |        |      |        |      |          |       |       |
| 7  | 10600.000 | 50.7 | +0.0   | +39.3   | +2.3   | +6.7 | +0.0   | 42.0 | 54.0     | -12.0 | Vert  |
|    | M         |      | +2.1   | -59.1   | +0.0   |      |        |      |          |       |       |
|    |           |      |        |         |        |      |        |      |          |       |       |
| 8  | 10600.000 | 50.6 | +0.0   | +39.3   | +2.3   | +6.7 | +0.0   | 41.9 | 54.0     | -12.1 | Horiz |
|    | M         |      | +2.1   | -59.1   | +0.0   |      |        |      |          |       |       |
|    |           |      |        |         |        |      |        |      |          |       |       |
| 9  | 10560.000 | 50.7 | +0.0   | +39.3   | +2.3   | +6.7 | +0.0   | 41.8 | 54.0     | -12.2 | Horiz |
|    | M         | 30.7 | +2.1   | -59.3   | +0.0   | 10.7 | 10.0   | 11.0 | 51.0     | 12.2  | HOHE  |
|    | 171       |      | 12.1   | -37.3   | 10.0   |      |        |      |          |       |       |
| 10 | 10550 000 | 50.5 | . 0. 0 | . 20. 2 | . 2. 2 | 7    | . 0. 0 | 41.7 | 540      | 10.2  | TT    |
| 10 |           | 50.5 | +0.0   | +39.3   | +2.3   | +6.7 | +0.0   | 41.7 | 54.0     | -12.3 | Horiz |
|    | M         |      | +2.1   | -59.2   | +0.0   |      |        |      |          |       |       |
|    |           |      |        |         |        |      |        |      |          |       |       |
| 11 | 10551.100 | 49.8 | +0.0   | +39.3   | +2.3   | +6.7 | +0.0   | 41.0 | 54.0     | -13.0 | Vert  |
|    | M         |      | +2.1   | -59.2   | +0.0   |      |        |      |          |       |       |
|    |           |      |        |         |        |      |        |      |          |       |       |
| 12 | 10560,000 | 49.0 | +0.0   | +39.3   | +2.3   | +6.7 | +0.0   | 40.1 | 54.0     | -13.9 | Vert  |
|    | M         | .,.0 | +2.1   | -59.3   | +0.0   |      |        |      | <b>U</b> | 20.7  |       |
|    | 141       |      | 12.1   | 37.3    | 10.0   |      |        |      |          |       |       |
| I  |           |      |        |         |        |      |        |      |          |       |       |

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CKC Laboratories, Inc. Date: 6/1/2012 Time: 19:25:21 Digital Path WO#: 92682 15.407(b) / 15.209 Radiated Spurious Emissions Test Distance: 3 Meters Sequence#: 209 Vert UNII Bands. 20MHz Channel width.

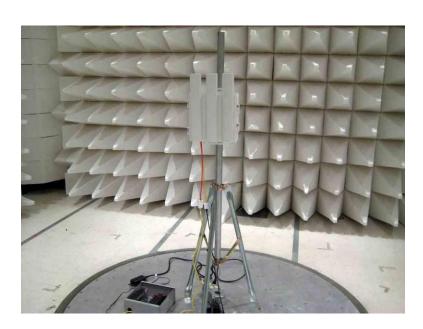




# **Test Setup Photos**



17dBi Sector

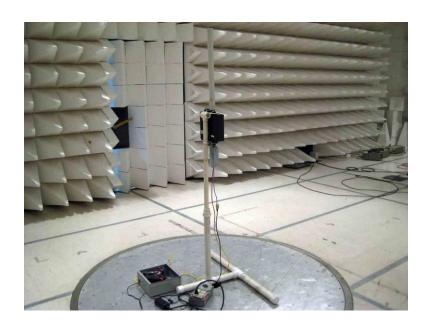


17dBi Sector





18dBi, 11dBi

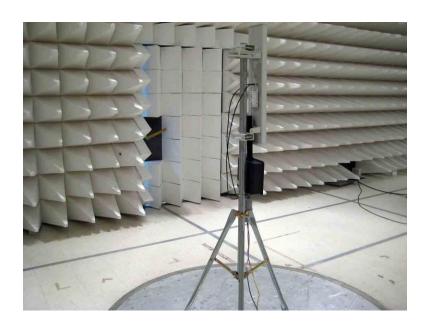


18dBi, 11dBi





20dBi Sector



20dBi Sector



# 15.407(b)(3) Undesirable Emission Limits 5.47-5.725GHz

## **Test Data Sheets**

Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • (510) 249 - 1170

Customer: **Digital Path** 

Specification: 15.407(b) / 15.209 Radiated Spurious Emissions

Work Order #:92682Date:6/2/2012Test Type:Radiated ScanTime:09:51:29Equipment:5GHz Panel (18dBi) + Omni (11dBi)Sequence#:211Manufacturer:Digital PathTested By:E. Wong

Model: G5RL10G S/N: EMI 2

Test Equipment:

| ID  | Asset #  | Description  | Model                        | Calibration Date | Cal Due Date |
|-----|----------|--|------------------------------|------------------|--------------|
| T1  | AN02668  | Spectrum Analyzer  | E4446A                       | 2/23/2011        | 2/23/2013    |
| T2  | AN02157  | Horn Antenna-ANSI<br>C63.5                                   | 3115                         | 1/17/2011        | 1/17/2013    |
| Т3  | AN03302  | Cable  | 32026-29094K-<br>29094K-72TC | 3/21/2012        | 3/21/2014    |
| T4  | ANP01210 | Cable  | FSJ1P-50A-4A                 | 3/15/2011        | 3/15/2013    |
| T5  | ANP05913 | Cable  | 32022-29094K-<br>65TC        | 8/30/2011        | 8/30/2013    |
| Т6  | AN03114  | Preamp   | AMF-7D-<br>00101800-30-10P   | 5/13/2011        | 5/13/2013    |
|     | ANP05935 | Attenuator   | 84A-10                       | 10/19/2011       | 10/19/2013   |
|     | ANP01211 | Attenuator   | 23-10-34                     | 4/15/2011        | 4/15/2013    |
|     | AN01417  | High Pass Filter   | 84300-80039                  | 2/9/2012         | 2/9/2014     |
|     | AN02694  | Active Horn<br>Antenna-ANSI<br>C63.5 Antenna<br>Factors (dB) | AMFW-5F-<br>18002650-20-10P  | 11/10/2010       | 11/10/2012   |
|     | AN02695  | Active Horn<br>Antenna-ANSI<br>C63.5 Antenna<br>Factors (dB) | AMFW-5F-<br>260400-33-8P     | 11/10/2010       | 11/10/2012   |
|     | ANP05911 | Cable  | 32022-29094K-<br>65TC        | 8/30/2011        | 8/30/2013    |
| T7  | AN00852  | Biconilog Antenna  | CBL 6111C                    | 11/16/2010       | 11/16/2012   |
| Т8  | AN00730  | Preamp   |                              | 1/31/2011        | 1/31/2013    |
| Т9  | ANP05299 | Cable  | RG214                        | 3/6/2011         | 3/6/2013     |
| T10 | ANP05300 | Cable  | RG214/U                      | 3/7/2011         | 3/7/2013     |
| T11 | ANP05440 | Cable  |                              | 3/7/2011         | 3/7/2013     |
|     | AN00432  | Loop Antenna   | 6502                         | 3/31/2011        | 3/31/2013    |

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Equipment Under Test (\* = EUT):

| Function             | Manufacturer | Model # | S/N   |
|----------------------|--------------|---------|-------|
| 5GHz Panel (18dBi) + | Digital Path | G5RL10G | EMI 2 |
| Omni (11dBi)*        | _            |         |       |

Support Devices:

| Function            | Manufacturer | Model #       | S/N             |
|---------------------|--------------|---------------|-----------------|
| Laptop Computer     | HP           | ProBook 6565b | 5CB13637ZF      |
| Laptop Power Supply | HP           | 608428-002    | F12941126327228 |

#### Test Conditions / Notes:

The EUT installed on a pole as intended. DC power port is connected to a DC power supply via a CAT5 cable. The Ethernet port is connected to a remote laptop via unshielded twisted pair.

The Remote laptop is running test software to exercise the intended functionalities. Representing the worst case configuration for the product series, Receiver circuit and GPS receiver are active.

 $11dBi\ Omni\ antenna\ is\ connected\ to\ radio\ 0\ \ (instance\ 1)$ 

18 dBi panel antenna is connected to radio1 (instance 2)

This data sheet is for the EUT transmitting via 18dBi Panel antenna connected to radio 1 (instance 2). Recoded data is from the non-intentional radiation of the product.

Freq: 5590MHz BW= 10MHz

802.11a: 24 Mbps, TX power setting= 21

Temperature: 21.9°C, Relative Humidity: 38-43%, Atmospheric Pressure: 101.5kPa

Frequency range of measurement = 9kHz-40GHz.

9 kH -150 kHz; RBW=200 Hz, VBW=200 Hz;150 kHz-30 MHz; RBW=9 kHz, VBW=9 kHz;30 MHz-1000 MHz; RBW=120 kHz, VBW=120 kHz,1000 MHz-40,000 MHz; RBW=1 MHz, VBW=1 MHz.

Recorded emission level is below the EIRP limit of -27dBm/MHz (68.2dBuV/m @ 3 meter) IAW 789033 D01 General UNII Test Procedures V01r01

Ext Attn: 0 dB

| Measu | rement Data: | Re   | eading lis | ted by ma | argin. |       | Τe    | est Distance | e: 3 Meters |        |       |
|-------|--------------|------|------------|-----------|--------|-------|-------|--------------|-------------|--------|-------|
| #     | Freq         | Rdng | T1         | T2        | T3     | T4    | Dist  | Corr         | Spec        | Margin | Polar |
|       |              |      | T5         | T6        | T7     | T8    |       |              |             |        |       |
|       |              |      | T9         | T10       | T11    |       |       |              |             |        |       |
|       | MHz          | dΒμV | dB         | dB        | dB     | dB    | Table | $dB\mu V/m$  | $dB\mu V/m$ | dB     | Ant   |
| 1     | 32.597M      | 48.7 | +0.0       | +0.0      | +0.0   | +0.0  | +0.0  | 39.6         | 40.0        | -0.4   | Vert  |
|       | QP           |      | +0.0       | +0.0      | +18.1  | -27.6 |       |              |             |        |       |
|       |              |      | +0.0       | +0.1      | +0.3   |       |       |              |             |        |       |
| ٨     | 32.597M      | 49.6 | +0.0       | +0.0      | +0.0   | +0.0  | +0.0  | 40.5         | 40.0        | +0.5   | Vert  |
|       |              |      | +0.0       | +0.0      | +18.1  | -27.6 |       |              |             |        |       |
|       |              |      | +0.0       | +0.1      | +0.3   |       |       |              |             |        |       |
| 3     | 51.817M      | 57.8 | +0.0       | +0.0      | +0.0   | +0.0  | +0.0  | 39.2         | 40.0        | -0.8   | Vert  |
|       | QP           |      | +0.0       | +0.0      | +8.3   | -27.5 |       |              |             |        |       |
|       |              |      | +0.0       | +0.2      | +0.4   |       |       |              |             |        |       |
| ٨     | 51.817M      | 60.0 | +0.0       | +0.0      | +0.0   | +0.0  | +0.0  | 41.4         | 40.0        | +1.4   | Vert  |
|       |              |      | +0.0       | +0.0      | +8.3   | -27.5 |       |              |             |        |       |
|       |              |      | +0.0       | +0.2      | +0.4   |       |       |              |             |        |       |

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| 5 765.509M  | 48.3 | +0.0 | +0.0 | +0.0  | +0.0  | +0.0 | 45.0 | 46.0 | -1.0 | Vert  |
|-------------|------|------|------|-------|-------|------|------|------|------|-------|
| QP          |      | +0.0 | +0.0 | +21.2 | -27.3 |      |      |      |      |       |
|             |      | +0.2 | +0.9 | +1.7  |       |      |      |      |      |       |
| ^ 765.509M  | 50.9 | +0.0 | +0.0 | +0.0  | +0.0  | +0.0 | 47.6 | 46.0 | +1.6 | Vert  |
|             |      | +0.0 | +0.0 | +21.2 | -27.3 |      |      |      |      |       |
|             |      | +0.2 | +0.9 | +1.7  |       |      |      |      |      |       |
| 7 30.627M   | 48.3 | +0.0 | +0.0 | +0.0  | +0.0  | +0.0 | 39.0 | 40.0 | -1.0 | Vert  |
| QP          |      | +0.0 | +0.0 | +17.9 | -27.6 |      |      |      |      |       |
|             |      | +0.0 | +0.1 | +0.3  |       |      |      |      |      |       |
| ^ 30.627M   | 51.1 | +0.0 | +0.0 | +0.0  | +0.0  | +0.0 | 41.8 | 40.0 | +1.8 | Vert  |
|             |      | +0.0 | +0.0 | +17.9 | -27.6 |      |      |      |      |       |
|             |      | +0.0 | +0.1 | +0.3  |       |      |      |      |      |       |
| 9 765.572M  | 48.3 | +0.0 | +0.0 | +0.0  | +0.0  | +0.0 | 45.0 | 46.0 | -1.0 | Horiz |
| QP          |      | +0.0 | +0.0 | +21.2 | -27.3 |      |      |      |      |       |
|             |      | +0.2 | +0.9 | +1.7  |       |      |      |      |      |       |
| ^ 765.572M  | 50.6 | +0.0 | +0.0 | +0.0  | +0.0  | +0.0 | 47.3 | 46.0 | +1.3 | Horiz |
|             |      | +0.0 | +0.0 | +21.2 | -27.3 |      |      |      |      |       |
|             |      | +0.2 | +0.9 | +1.7  |       |      |      |      |      |       |
| 11 191.995M | 59.3 | +0.0 | +0.0 | +0.0  | +0.0  | +0.0 | 42.1 | 43.5 | -1.4 | Vert  |
| QP          |      | +0.0 | +0.0 | +9.0  | -27.5 |      |      |      |      |       |
|             |      | +0.1 | +0.4 | +0.8  |       |      |      |      |      |       |
| ^ 191.995M  | 60.0 | +0.0 | +0.0 | +0.0  | +0.0  | +0.0 | 42.8 | 43.5 | -0.7 | Vert  |
|             |      | +0.0 | +0.0 | +9.0  | -27.5 |      |      |      |      |       |
|             |      | +0.1 | +0.4 | +0.8  |       |      |      |      |      |       |
| 13 761.572M | 47.8 | +0.0 | +0.0 | +0.0  | +0.0  | +0.0 | 44.4 | 46.0 | -1.6 | Horiz |
| QP          |      | +0.0 | +0.0 | +21.1 | -27.3 |      |      |      |      |       |
|             |      | +0.2 | +0.9 | +1.7  |       |      |      |      |      |       |
| ^ 761.572M  | 49.8 | +0.0 | +0.0 | +0.0  | +0.0  | +0.0 | 46.4 | 46.0 | +0.4 | Horiz |
|             |      | +0.0 | +0.0 | +21.1 | -27.3 |      |      |      |      |       |
|             |      | +0.2 | +0.9 | +1.7  |       |      |      |      |      |       |
| 15 816.009M | 45.3 | +0.0 | +0.0 | +0.0  | +0.0  | +0.0 | 42.9 | 46.0 | -3.1 | Vert  |
| QP          |      | +0.0 | +0.0 | +21.9 | -27.2 |      |      |      |      |       |
|             |      | +0.2 | +0.9 | +1.8  |       |      |      |      |      |       |
| ^ 816.009M  | 46.8 | +0.0 | +0.0 | +0.0  | +0.0  | +0.0 | 44.4 | 46.0 | -1.6 | Vert  |
|             |      | +0.0 | +0.0 | +21.9 | -27.2 |      |      |      |      |       |
|             |      | +0.2 | +0.9 | +1.8  |       |      |      |      |      |       |
| 17 43.795M  | 51.5 | +0.0 | +0.0 | +0.0  | +0.0  | +0.0 | 36.2 | 40.0 | -3.8 | Vert  |
| QP          |      | +0.0 |      | +11.8 | -27.6 |      |      |      |      |       |
|             |      | +0.0 | +0.2 | +0.3  |       |      |      |      |      |       |
| ^ 43.795M   | 54.2 | +0.0 | +0.0 | +0.0  | +0.0  | +0.0 | 38.9 | 40.0 | -1.1 | Vert  |
|             |      | +0.0 | +0.0 | +11.8 | -27.6 |      |      |      |      |       |
|             |      | +0.0 | +0.2 | +0.3  |       |      |      |      |      |       |
| 19 720.009M | 46.3 | +0.0 | +0.0 | +0.0  | +0.0  | +0.0 | 42.0 | 46.0 | -4.0 | Vert  |
| QP          |      | +0.0 | +0.0 | +20.2 | -27.2 |      |      |      |      |       |
|             |      | +0.2 | +0.8 | +1.7  |       |      |      |      |      |       |
| ^ 720.009M  | 46.5 | +0.0 | +0.0 | +0.0  | +0.0  | +0.0 | 42.2 | 46.0 | -3.8 | Vert  |
|             | -    | +0.0 | +0.0 | +20.2 | -27.2 |      |      |      |      |       |
|             |      | +0.2 | +0.8 | +1.7  |       |      |      |      |      |       |
| 21 695.350M | 46.8 | +0.0 | +0.0 | +0.0  | +0.0  | +0.0 | 42.0 | 46.0 | -4.0 | Horiz |
|             |      | +0.0 | +0.0 | +19.8 | -27.2 |      |      |      |      |       |
|             |      | +0.2 | +0.8 | +1.6  |       |      |      |      |      |       |
|             |      |      |      |       |       |      |      |      |      |       |

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| 22 863.999M  | 44.2 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 41.7 | 46.0 | -4.3 | Vert  |
|--------------|------|------|-------|-------|-------|------|------|------|------|-------|
|              |      | +0.0 | +0.0  | +21.8 | -27.3 |      |      |      |      |       |
|              |      | +0.2 | +1.0  | +1.8  |       |      |      |      |      |       |
| 23 898.460M  | 44.1 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 41.6 | 46.0 | -4.4 | Vert  |
|              |      | +0.0 | +0.0  | +21.8 | -27.4 |      |      |      |      |       |
|              |      | +0.2 | +1.0  | +1.9  |       |      |      |      |      |       |
| 24 912.000M  | 43.8 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 41.2 | 46.0 | -4.8 | Vert  |
|              |      | +0.0 | +0.0  | +21.8 | -27.5 |      |      |      |      |       |
|              |      | +0.2 | +1.0  | +1.9  |       |      |      |      |      |       |
| 25 65.757M   | 55.6 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 34.8 | 40.0 | -5.2 | Vert  |
| QP           |      | +0.0 | +0.0  | +6.1  | -27.5 |      |      |      |      |       |
|              |      | +0.0 | +0.2  | +0.4  |       |      |      |      |      |       |
| ^ 65.757M    | 57.5 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 36.7 | 40.0 | -3.3 | Vert  |
|              |      | +0.0 | +0.0  | +6.1  | -27.5 |      |      |      |      |       |
|              |      | +0.0 | +0.2  | +0.4  |       |      |      |      |      |       |
| 27 39.480M   | 47.3 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 34.5 | 40.0 | -5.5 | Vert  |
|              |      | +0.0 | +0.0  | +14.3 | -27.6 |      |      |      |      |       |
|              |      | +0.0 | +0.2  | +0.3  |       |      |      |      |      |       |
| 28 960.000M  | 42.3 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 39.9 | 46.0 | -6.1 | Vert  |
|              |      | +0.0 | +0.0  | +22.1 | -27.8 |      |      |      |      |       |
|              |      | +0.3 | +1.0  | +2.0  |       |      |      |      |      |       |
| 29 165.607M  | 52.9 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 36.6 | 43.5 | -6.9 | Vert  |
| QP           |      | +0.0 | +0.0  | +10.1 | -27.5 |      |      |      |      |       |
|              |      | +0.1 | +0.3  | +0.7  |       |      |      |      |      |       |
| ^ 165.607M   | 54.6 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 38.3 | 43.5 | -5.2 | Vert  |
|              |      | +0.0 | +0.0  | +10.1 | -27.5 |      |      |      |      |       |
|              |      | +0.1 | +0.3  | +0.7  |       |      |      |      |      |       |
| 31 287.995M  | 51.9 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 38.9 | 46.0 | -7.1 | Vert  |
|              |      | +0.0 | +0.0  | +12.9 | -27.5 |      |      |      |      |       |
|              |      | +0.1 | +0.5  | +1.0  |       |      |      |      |      |       |
| 32 875.010M  | 40.9 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 38.5 | 46.0 | -7.5 | Vert  |
|              |      | +0.0 | +0.0  | +21.8 | -27.3 |      |      |      |      |       |
|              |      | +0.2 | +1.0  | +1.9  |       |      |      |      |      |       |
| 33 794.590M  | 41.0 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 38.4 | 46.0 | -7.6 | Vert  |
|              |      | +0.0 | +0.0  | +21.8 | -27.2 |      |      |      |      |       |
|              |      | +0.2 | +0.9  | +1.7  |       |      |      |      |      |       |
| 34 4267.000M | 66.2 | +0.0 | +32.7 | +1.4  | +3.9  | +0.0 | 45.9 | 54.0 | -8.1 | Vert  |
|              |      | +1.4 | -59.7 | +0.0  | +0.0  |      |      |      |      |       |
|              |      | +0.0 | +0.0  | +0.0  |       |      |      |      |      |       |
| 35 1030.500M | 78.3 | +0.0 | +23.5 | +0.7  | +1.8  | +0.0 | 45.3 | 54.0 | -8.7 | Horiz |
|              |      | +0.7 | -59.7 | +0.0  | +0.0  |      |      |      |      |       |
|              |      | +0.0 | +0.0  | +0.0  |       |      |      |      |      |       |
| 36 765.450M  | 40.4 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 37.1 | 46.0 | -8.9 | Horiz |
|              |      | +0.0 | +0.0  | +21.2 | -27.3 |      |      |      |      |       |
|              |      | +0.2 | +0.9  | +1.7  |       |      |      |      |      |       |
| 37 231.780M  | 51.9 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 37.1 | 46.0 | -8.9 | Vert  |
|              |      | +0.0 | +0.0  | +11.3 | -27.5 |      |      |      |      |       |
|              |      | +0.1 | +0.4  | +0.9  |       |      |      |      |      |       |
| 38 88.850M   | 52.6 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 34.6 | 43.5 | -8.9 | Vert  |
|              |      | +0.0 | +0.0  | +8.7  | -27.4 |      |      |      |      |       |
|              |      | +0.0 | +0.2  | +0.5  |       |      |      |      |      |       |
|              |      |      |       |       |       |      |      |      |      |       |

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| 39       | 528.000M  | 43.8 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 37.0 | 46.0 | -9.0  | Horiz |
|----------|-----------|------|------|-------|-------|-------|------|------|------|-------|-------|
|          |           |      | +0.0 | +0.0  | +18.2 | -27.3 |      |      |      |       |       |
|          |           |      | +0.2 | +0.7  | +1.4  |       |      |      |      |       |       |
| 40       | 4324.000M | 64.9 | +0.0 | +32.5 | +1.4  | +3.9  | +0.0 | 44.5 | 54.0 | -9.5  | Horiz |
|          |           |      | +1.4 | -59.6 | +0.0  | +0.0  |      |      |      |       |       |
|          |           |      | +0.0 | +0.0  | +0.0  |       |      |      |      |       |       |
| 41       | 695.430M  | 40.7 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 35.9 | 46.0 | -10.1 | Vert  |
|          |           |      | +0.0 | +0.0  | +19.8 | -27.2 |      |      |      |       |       |
|          |           |      | +0.2 | +0.8  | +1.6  |       |      |      |      |       |       |
| 42       | 499.180M  | 43.2 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 35.8 | 46.0 | -10.2 | Vert  |
|          |           |      | +0.0 | +0.0  | +17.8 | -27.3 |      |      |      |       |       |
|          |           |      | +0.2 | +0.6  | +1.3  |       |      |      |      |       |       |
| 43       | 299.520M  | 48.4 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 35.7 | 46.0 | -10.3 | Vert  |
|          |           |      | +0.0 | +0.0  | +13.1 | -27.4 |      |      |      |       |       |
|          |           |      | +0.1 | +0.5  | +1.0  |       |      |      |      |       |       |
| 44       | 563.030M  | 41.8 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 35.5 | 46.0 | -10.5 | Vert  |
|          |           |      | +0.0 | +0.0  | +18.7 | -27.3 |      |      |      |       |       |
|          |           |      | +0.2 | +0.7  | +1.4  |       |      |      |      |       |       |
| 45       | 1397.000M | 75.3 | +0.0 | +24.0 | +0.8  | +2.1  | +0.0 | 43.3 | 54.0 | -10.7 | Horiz |
|          |           |      | +0.8 | -59.7 | +0.0  | +0.0  |      |      |      |       |       |
|          |           |      | +0.0 | +0.0  | +0.0  |       |      |      |      |       |       |
| 46       | 336.020M  | 46.6 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 34.8 | 46.0 | -11.2 | Vert  |
|          |           |      | +0.0 | +0.0  | +14.0 | -27.5 |      |      |      |       |       |
|          |           |      | +0.1 | +0.5  | +1.1  |       |      |      |      |       |       |
| 47       | 629.230M  | 40.1 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 34.7 | 46.0 | -11.3 | Vert  |
|          |           |      | +0.0 | +0.0  | +19.3 | -27.1 |      |      |      |       |       |
|          |           |      | +0.2 | +0.7  | +1.5  |       |      |      |      |       |       |
| 48       | 239.980M  | 48.6 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 34.3 | 46.0 | -11.7 | Vert  |
|          |           |      | +0.0 | +0.0  | +11.8 | -27.5 |      |      |      |       |       |
|          |           |      | +0.1 | +0.4  | +0.9  |       |      |      |      |       |       |
| 49       | 192.000M  | 48.1 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 30.9 | 43.5 | -12.6 | Horiz |
|          |           |      | +0.0 | +0.0  | +9.0  | -27.5 |      |      |      |       |       |
|          |           |      | +0.1 | +0.4  | +0.8  |       |      |      |      |       |       |
| 50       | 106.730M  | 46.7 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 30.7 | 43.5 | -12.8 | Vert  |
|          |           |      | +0.0 | +0.0  | +10.5 | -27.5 |      |      |      |       |       |
|          |           |      | +0.1 | +0.3  | +0.6  |       |      |      |      |       |       |
| 51       | 1396.000M | 72.9 | +0.0 | +24.0 | +0.8  | +2.1  | +0.0 | 40.9 | 54.0 | -13.1 | Vert  |
|          |           |      | +0.8 | -59.7 | +0.0  | +0.0  |      |      |      |       |       |
| <u> </u> |           |      | +0.0 | +0.0  | +0.0  |       |      |      |      |       |       |
| 52       | 96.000M   | 47.6 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 30.2 | 43.5 | -13.3 | Vert  |
|          |           |      | +0.0 | +0.0  | +9.5  | -27.6 |      |      |      |       |       |
|          |           |      | +0.0 | +0.2  | +0.5  |       |      |      |      |       |       |
| 53       | 399.200M  | 41.9 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 31.9 | 46.0 | -14.1 | Horiz |
|          |           |      | +0.0 | +0.0  | +15.5 | -27.4 |      |      |      |       |       |
|          |           |      | +0.1 | +0.6  | +1.2  |       |      |      |      |       |       |
| 54       | 624.000M  | 35.9 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 30.5 | 46.0 | -15.5 | Horiz |
|          |           |      | +0.0 | +0.0  | +19.3 | -27.1 |      |      |      |       |       |
|          |           |      | +0.2 | +0.7  | +1.5  |       |      |      |      |       |       |
| 55       | 32.610M   | 33.3 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 24.2 | 40.0 | -15.8 | Horiz |
|          |           |      | +0.0 | +0.0  | +18.1 | -27.6 |      |      |      |       |       |
|          |           |      | +0.0 | +0.1  | +0.3  |       |      |      |      |       |       |
|          |           |      |      |       |       |       |      |      |      |       |       |

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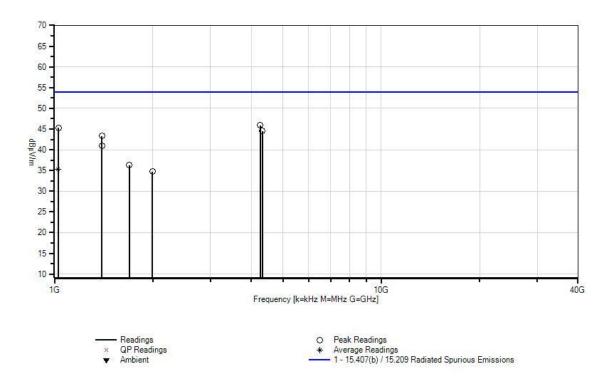


| 56 | 1696.000M | 66.6 | +0.0 | +25.1 | +0.9  | +2.3  | +0.0 | 36.3 | 54.0 | -17.7 | Vert  |
|----|-----------|------|------|-------|-------|-------|------|------|------|-------|-------|
|    |           |      | +0.9 | -59.5 | +0.0  | +0.0  |      |      |      |       |       |
|    |           |      | +0.0 | +0.0  | +0.0  |       |      |      |      |       |       |
| 57 | 232.900M  | 43.0 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 28.2 | 46.0 | -17.8 | Horiz |
|    |           |      | +0.0 | +0.0  | +11.3 | -27.5 |      |      |      |       |       |
|    |           |      | +0.1 | +0.4  | +0.9  |       |      |      |      |       |       |
| 58 | 144.010M  | 40.3 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 25.4 | 43.5 | -18.1 | Vert  |
|    |           |      | +0.0 | +0.0  | +11.4 | -27.4 |      |      |      |       |       |
|    |           |      | +0.1 | +0.3  | +0.7  |       |      |      |      |       |       |
| 59 | 1026.600M | 68.4 | +0.0 | +23.4 | +0.7  | +1.8  | +0.0 | 35.3 | 54.0 | -18.7 | Vert  |
|    | Ave       |      | +0.7 | -59.7 | +0.0  | +0.0  |      |      |      |       |       |
|    |           |      | +0.0 | +0.0  | +0.0  |       |      |      |      |       |       |
| ^  | 1026.600M | 83.9 | +0.0 | +23.4 | +0.7  | +1.8  | +0.0 | 50.8 | 54.0 | -3.2  | Vert  |
|    |           |      | +0.7 | -59.7 | +0.0  | +0.0  |      |      |      |       |       |
|    |           |      | +0.0 | +0.0  | +0.0  |       |      |      |      |       |       |
| 61 | 1993.000M | 63.3 | +0.0 | +26.5 | +1.0  | +2.5  | +0.0 | 34.7 | 54.0 | -19.3 | Vert  |
|    |           |      | +0.9 | -59.5 | +0.0  | +0.0  |      |      |      |       |       |
|    |           |      | +0.0 | +0.0  | +0.0  |       |      |      |      |       |       |
| 62 | 121.030M  | 38.0 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 23.1 | 43.5 | -20.4 | Vert  |
|    |           |      | +0.0 | +0.0  | +11.5 | -27.4 |      |      |      |       |       |
|    |           |      | +0.1 | +0.3  | +0.6  |       |      |      |      |       |       |
| 63 | 66.200M   | 39.6 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 18.8 | 40.0 | -21.2 | Horiz |
|    |           |      | +0.0 | +0.0  | +6.1  | -27.5 |      |      |      |       |       |
|    |           |      | +0.0 | +0.2  | +0.4  |       |      |      |      |       |       |
| 64 | 43.490M   | 33.7 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 18.6 | 40.0 | -21.4 | Horiz |
|    |           |      | +0.0 | +0.0  | +12.0 | -27.6 |      |      |      |       |       |
|    |           |      | +0.0 | +0.2  | +0.3  |       |      |      |      |       |       |
| 65 | 240.020M  | 35.9 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 21.6 | 46.0 | -24.4 | Horiz |
|    |           |      | +0.0 | +0.0  | +11.8 | -27.5 |      |      |      |       |       |
|    |           |      | +0.1 | +0.4  | +0.9  |       |      |      |      |       |       |
|    |           |      |      |       |       |       |      |      |      |       |       |

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CKC Laboratories, Inc. Date: 6/2/2012 Time: 09:51:29 Digital Path WO#: 92682 15.407(b) / 15.209 Radiated Spurious Emissions Test Distance: 3 Meters Sequence#: 211 Horiz UNII Bands. 20MHz Channel width.





Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • (510) 249 - 1170

Customer: **Digital Path** 

Specification: 15.407(b) / 15.209 Radiated Spurious Emissions

Work Order #:92682Date:5/27/2012Test Type:Radiated ScanTime:09:17:11Equipment:5GHz Tri-Sector (17dBi)Sequence#:201Manufacturer:Digital PathTested By:E. Wong

Model: G5RL10T S/N: EMI 1

## Test Equipment:

| 1 est Equi | pintenti |                   |                 |                  |              |
|------------|----------|-------------------|-----------------|------------------|--------------|
| ID         | Asset #  | Description       | Model           | Calibration Date | Cal Due Date |
| T1         | AN02668  | Spectrum Analyzer | E4446A          | 2/23/2011        | 2/23/2013    |
| T2         | AN02157  | Horn Antenna-ANSI | 3115            | 1/17/2011        | 1/17/2013    |
|            |          | C63.5             |                 |                  |              |
| T3         | AN03302  | Cable             | 32026-29094K-   | 3/21/2012        | 3/21/2014    |
|            |          |                   | 29094K-72TC     |                  |              |
| T4         | ANP01210 | Cable             | FSJ1P-50A-4A    | 3/15/2011        | 3/15/2013    |
| T5         | ANP05913 | Cable             | 32022-29094K-   | 8/30/2011        | 8/30/2013    |
|            |          |                   | 65TC            |                  |              |
| Т6         | AN03114  | Preamp            | AMF-7D-         | 5/13/2011        | 5/13/2013    |
|            |          |                   | 00101800-30-10P |                  |              |
|            | ANP05935 | Attenuator        | 84A-10          | 10/19/2011       | 10/19/2013   |
|            | ANP01211 | Attenuator        | 23-10-34        | 4/15/2011        | 4/15/2013    |
| T7         | AN01417  | High Pass Filter  | 84300-80039     | 2/9/2012         | 2/9/2014     |
| T8         | AN02694  | Active Horn       | AMFW-5F-        | 11/10/2010       | 11/10/2012   |
|            |          | Antenna-ANSI      | 18002650-20-10P |                  |              |
|            |          | C63.5 Antenna     |                 |                  |              |
|            |          | Factors (dB)      |                 |                  |              |
|            | AN02695  | Active Horn       | AMFW-5F-        | 11/10/2010       | 11/10/2012   |
|            |          | Antenna-ANSI      | 260400-33-8P    |                  |              |
|            |          | C63.5 Antenna     |                 |                  |              |
|            |          | Factors (dB)      |                 |                  |              |
| T9         | ANP05911 | Cable             | 32022-29094K-   | 8/30/2011        | 8/30/2013    |
|            |          |                   | 65TC            |                  |              |
|            | AN00730  | Preamp            |                 | 1/31/2011        | 1/31/2013    |
|            | AN00432  | Loop Antenna      | 6502            | 3/31/2011        | 3/31/2013    |
|            | AN00852  | Biconilog Antenna | CBL 6111C       | 11/16/2010       | 11/16/2012   |
|            | ANP05299 | Cable             | RG214           | 3/6/2011         | 3/6/2013     |
|            | ANP05300 | Cable             | RG214/U         | 3/7/2011         | 3/7/2013     |
|            | ANP05440 | Cable             |                 | 3/7/2011         | 3/7/2013     |

# Equipment Under Test (\* = EUT):

| Function                 | Manufacturer | Model # | S/N   |
|--------------------------|--------------|---------|-------|
| 5GHz Tri-Sector (17dBi)* | Digital Path | G5RL10T | EMI 1 |

## Support Devices:

| Function            | Manufacturer | Model #       | S/N             |
|---------------------|--------------|---------------|-----------------|
| Laptop Computer     | HP           | ProBook 6565b | 5CB13637ZF      |
| Laptop Power Supply | HP           | 608428-002    | F12941126327228 |

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## Test Conditions / Notes:

The EUT installed on a metal pole as intended. DC power port is connected to a DC power supply via a CAT5 cable. The Ethernet port is connected to a remote laptop via unshielded twisted pair.

The Remote laptop is running test software to exercise the intended functionalities. receiver circuit is active Radio 0, TX

Radio 1, OFF

5470-5725MHz

Freq: 5495MHz, 5590MHz, 5705MHz.

BW = 10 MHz

802.11a: 24Mbps, TX power setting= 12,12,12

802.11n: 13MCS HT20 2S,TX power setting= 12,12,12

Freq: 5500MHz, 5590MHz, 5700MHz.

BW = 20MHz

802.11a: 24 Mbps, TX power setting= 14.5, 14.5, 14.5

802.11n: 6.5MCS HT20 1S, TX power setting= 14.5, 14.5, 14.5

Temperature: 21.9°C, Relative Humidity: 38-43%, Atmospheric Pressure: 101.5kPa

No emission found. Detection was performed with reduced resolution bandwidth, recorded data represent noise floor level at the required BW.

Frequency range of measurement = 9kHz-40GHz.

9 kH -150 kHz; RBW=200 Hz, VBW=200 Hz;150 kHz-30 MHz; RBW=9 kHz, VBW=9 kHz;30 MHz-1000 MHz; RBW=120 kHz, VBW=120 kHz,1000 MHz-40,000 MHz; RBW=1 MHz, VBW=1 MHz.

Recorded emission level is below the EIRP limit of -27dBm/MHz (68.2dBuV/m @ 3 meter) IAW 789033 D01 General UNII Test Procedures V01r01

Ext Attn: 0 dB

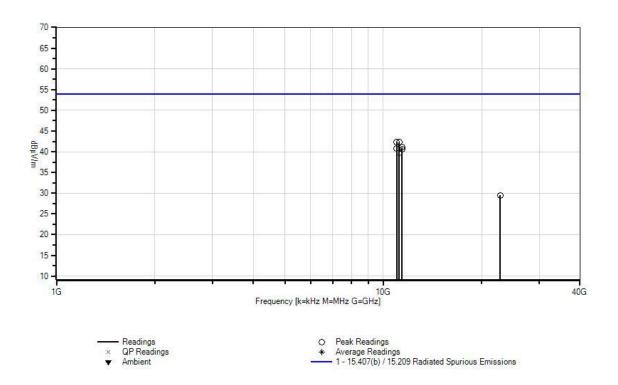
| Measu | rement Data: | Re   | eading list | ted by ma | ırgin. | Test Distance: 3 Meters |       |             |             |        |       |
|-------|--------------|------|-------------|-----------|--------|-------------------------|-------|-------------|-------------|--------|-------|
| #     | Freq         | Rdng | T1          | T2        | T3     | T4                      | Dist  | Corr        | Spec        | Margin | Polar |
|       |              |      | T5          | T6        | T7     | T8                      |       |             |             |        |       |
|       |              |      | T9          |           |        |                         |       |             |             |        |       |
|       | MHz          | dΒμV | dB          | dB        | dB     | dB                      | Table | $dB\mu V/m$ | $dB\mu V/m$ | dB     | Ant   |
| 1     | 11001.600    | 49.7 | +0.0        | +39.4     | +2.3   | +6.8                    | +0.0  | 42.4        | 54.0        | -11.6  | Vert  |
|       | M            |      | +2.2        | -58.0     | +0.0   | +0.0                    |       |             |             |        |       |
|       |              |      | +0.0        |           |        |                         |       |             |             |        |       |
| 2     | 11176.680    | 49.2 | +0.0        | +39.1     | +2.3   | +6.8                    | +0.0  | 42.3        | 54.0        | -11.7  | Vert  |
|       | M            |      | +2.2        | -57.3     | +0.0   | +0.0                    |       |             |             |        |       |
|       |              |      | +0.0        |           |        |                         |       |             |             |        |       |
| 3     | 11400.000    | 48.1 | +0.0        | +38.8     | +2.3   | +6.9                    | +0.0  | 41.1        | 54.0        | -12.9  | Horiz |
|       | M            |      | +2.2        | -57.2     | +0.0   | +0.0                    |       |             |             |        |       |
|       |              |      | +0.0        |           |        |                         |       |             |             |        |       |
| 4     | 10988.400    | 48.1 | +0.0        | +39.4     | +2.3   | +6.8                    | +0.0  | 40.8        | 54.0        | -13.2  | Horiz |
|       | M            |      | +2.2        | -58.0     | +0.0   | +0.0                    |       |             |             |        |       |
|       |              |      | +0.0        |           |        |                         |       |             |             |        |       |

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| 5 11410.000<br>M | 47.6 | +0.0<br>+2.2 | +38.8 | +2.3  | +6.9<br>+0.0 | +0.0 | 40.7 | 54.0 | -13.3 | Horiz |
|------------------|------|--------------|-------|-------|--------------|------|------|------|-------|-------|
| 2.2              |      | +0.0         | 0,11  | . 0.0 | . 0.0        |      |      |      |       |       |
| 6 11180.591      | 46.7 | +0.0         | +39.1 | +2.3  | +6.8         | +0.0 | 39.8 | 54.0 | -14.2 | Horiz |
| M                |      | +2.2         | -57.3 | +0.0  | +0.0         |      |      |      |       |       |
|                  |      | +0.0         |       |       |              |      |      |      |       |       |
| 7 22797.000      | 51.2 | +0.0         | +0.0  | +0.0  | +0.0         | -9.5 | 29.5 | 54.0 | -24.5 | Horiz |
| M                |      | +0.0         | +0.0  | +0.0  | -16.5        |      |      |      |       |       |
|                  |      | +4.3         |       |       |              |      |      |      |       |       |

CKC Laboratories, Inc. Date: 5/27/2012 Time: 09:17:11 Digital Path WO#: 92682 15.407(b) / 15.209 Radiated Spurious Emissions Test Distance: 3 Meters Sequence#: 201 Horiz UNII Bands. 20MHz Channel width.





Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • (510) 249 - 1170

Customer: **Digital Path** 

Specification: 15.407(b) / 15.209 Radiated Spurious Emissions

Work Order #:92682Date:5/29/2012Test Type:Radiated ScanTime:22:12:00Equipment:5GHz Sector (20 dBi)Sequence#:204Manufacturer:Digital PathTested By:E. Wong

Model: G5RL10E S/N: EMI 3

## Test Equipment:

| I csi Equi |          |  |                              |                  |              |
|------------|----------|--|------------------------------|------------------|--------------|
| ID         | Asset #  | Description  | Model                        | Calibration Date | Cal Due Date |
| T1         | AN02668  | Spectrum Analyzer  | E4446A                       | 2/23/2011        | 2/23/2013    |
| T2         | AN02157  | Horn Antenna-ANSI<br>C63.5                                   | 3115                         | 1/17/2011        | 1/17/2013    |
| Т3         | AN03302  | Cable  | 32026-29094K-<br>29094K-72TC | 3/21/2012        | 3/21/2014    |
| T4         | ANP01210 | Cable  | FSJ1P-50A-4A                 | 3/15/2011        | 3/15/2013    |
| T5         | ANP05913 | Cable  | 32022-29094K-<br>65TC        | 8/30/2011        | 8/30/2013    |
| Т6         | AN03114  | Preamp   | AMF-7D-<br>00101800-30-10P   | 5/13/2011        | 5/13/2013    |
| _          | ANP05935 | Attenuator   | 84A-10                       | 10/19/2011       | 10/19/2013   |
|            | ANP01211 | Attenuator   | 23-10-34                     | 4/15/2011        | 4/15/2013    |
| T7         | AN01417  | High Pass Filter   | 84300-80039                  | 2/9/2012         | 2/9/2014     |
|            | AN02694  | Active Horn<br>Antenna-ANSI<br>C63.5 Antenna<br>Factors (dB) | AMFW-5F-<br>18002650-20-10P  | 11/10/2010       | 11/10/2012   |
|            | AN02695  | Active Horn<br>Antenna-ANSI<br>C63.5 Antenna<br>Factors (dB) | AMFW-5F-<br>260400-33-8P     | 11/10/2010       | 11/10/2012   |
|            | ANP05911 | Cable  | 32022-29094K-<br>65TC        | 8/30/2011        | 8/30/2013    |
|            | AN00730  | Preamp   |                              | 1/31/2011        | 1/31/2013    |
|            | AN00432  | Loop Antenna   | 6502                         | 3/31/2011        | 3/31/2013    |
|            | AN00852  | Biconilog Antenna  | CBL 6111C                    | 11/16/2010       | 11/16/2012   |
|            | ANP05299 | Cable  | RG214                        | 3/6/2011         | 3/6/2013     |
|            | ANP05300 | Cable  | RG214/U                      | 3/7/2011         | 3/7/2013     |
| _          | ANP05440 | Cable  |                              | 3/7/2011         | 3/7/2013     |

## **Equipment Under Test (\* = EUT):**

| Function              | Manufacturer | Model # | S/N   |
|-----------------------|--------------|---------|-------|
| 5GHz Sector (20 dBi)* | Digital Path | G5RL10E | EMI 3 |

## Support Devices:

| Function            | Manufacturer | Model #       | S/N             |
|---------------------|--------------|---------------|-----------------|
| Laptop Computer     | HP           | ProBook 6565b | 5CB13637ZF      |
| Laptop Power Supply | HP           | 608428-002    | F12941126327228 |

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#### Test Conditions / Notes:

The EUT installed on a metal pole as intended. DC power port is connected to a DC power supply via a CAT5 cable. The Ethernet port is connected to a remote laptop via unshielded twisted pair.

The Remote laptop is running test software to exercise the intended functionalities. Receiver circuit is active.

Vertical polarity of the antenna is connected to Card 1, Ant port 2

Horizontal polarity of the antenna is connected to Card 1, Ant port 0

Radio 0, OFF Radio 1, TX

5470-5725MHz

Freq: 5495MHz, 5590MHz, 5705MHz.

BW = 10 MHz

802.11a: 24Mbps, TX power setting= 11.5, 11.5, 11.5

802.11n: 13MCS HT20 2S,TX power setting = 11.5, 11.5, 11.5

Freq: 5500MHz, 5590MHz, 5700MHz.

BW = 20MHz

802.11a: 24 Mbps, TX power setting= 10.5, 14.10.5

802.11n: 6.5MCS HT20 1S, TX power setting= 12, 14 .8.5

Temperature: 21.9°C, Relative Humidity: 38-43%, Atmospheric Pressure: 101.5kPa

No emission found. Detection was performed with reduced resolution bandwidth, recorded data represent noise floor level at required BW.

Frequency range of measurement = 9kHz-40GHz.

9 kH -150 kHz; RBW=200 Hz, VBW=200 Hz;150 kHz-30 MHz; RBW=9 kHz, VBW=9 kHz;30 MHz-1000 MHz; RBW=120 kHz, VBW=120 kHz,1000 MHz-40,000 MHz; RBW=1 MHz, VBW=1 MHz.

Recorded emission level is below the EIRP limit of -27dBm/MHz (68.2dBuV/m @ 3 meter) IAW 789033 D01 General UNII Test Procedures V01r01

Ext Attn: 0 dB

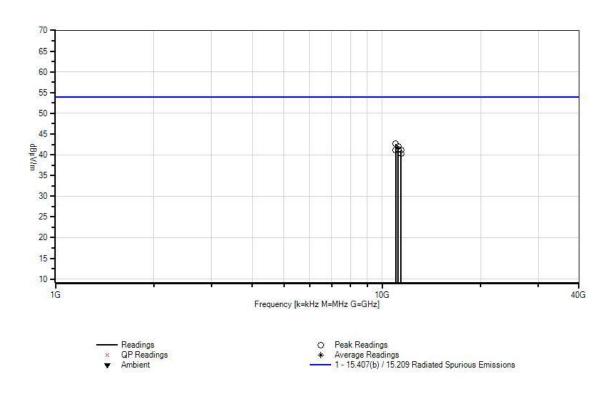
| Measu | rement Data: | Re   | eading list | ted by ma | argin. |      | Τe    | est Distance | e: 1 Meter  |        |       |
|-------|--------------|------|-------------|-----------|--------|------|-------|--------------|-------------|--------|-------|
| #     | Freq         | Rdng | T1          | T2        | T3     | T4   | Dist  | Corr         | Spec        | Margin | Polar |
|       |              |      | T5          | T6        | T7     |      |       |              |             |        |       |
|       | MHz          | dΒμV | dB          | dB        | dB     | dB   | Table | $dB\mu V/m$  | $dB\mu V/m$ | dB     | Ant   |
| 1     | 11000.300    | 49.9 | +0.0        | +39.4     | +2.3   | +6.8 | +0.0  | 42.6         | 54.0        | -11.4  | Vert  |
|       | M            |      | +2.2        | -58.0     | +0.0   |      |       |              |             |        |       |
|       |              |      |             |           |        |      |       |              |             |        |       |
| 2     | 11180.200    | 48.9 | +0.0        | +39.1     | +2.3   | +6.8 | +0.0  | 42.0         | 54.0        | -12.0  | Horiz |
|       | M            |      | +2.2        | -57.3     | +0.0   |      |       |              |             |        |       |
|       |              |      |             |           |        |      |       |              |             |        |       |
| 3     | 11181.400    | 48.2 | +0.0        | +39.1     | +2.3   | +6.8 | +0.0  | 41.3         | 54.0        | -12.7  | Horiz |
|       | M            |      | +2.2        | -57.3     | +0.0   |      |       |              |             |        |       |
|       |              |      |             |           |        |      |       |              |             |        |       |
| 4     | 10989.000    | 48.4 | +0.0        | +39.4     | +2.3   | +6.8 | +0.0  | 41.1         | 54.0        | -12.9  | Vert  |
|       | M            |      | +2.2        | -58.0     | +0.0   |      |       |              |             |        |       |
|       |              |      |             |           |        |      |       |              |             |        |       |

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| 5 11400.000<br>M | 48.1 | +0.0<br>+2.2 | +38.8<br>-57.2 | +2.3<br>+0.0 | +6.9 | +0.0 | 41.1 | 54.0 | -12.9 | Vert |
|------------------|------|--------------|----------------|--------------|------|------|------|------|-------|------|
| 6 11410.000<br>M | 47.1 | +0.0<br>+2.2 | +38.8<br>-57.1 | +2.3<br>+0.0 | +6.9 | +0.0 | 40.2 | 54.0 | -13.8 | Vert |

CKC Laboratories, Inc. Date: 5/29/2012 Time: 22:12:00 Digital Path WO#: 92682 15.407(b) / 15.209 Radiated Spurious Emissions Test Distance: 1 Meter Sequence#: 204 Vert UNII Bands. 20MHz Channel width.





Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • (510) 249 - 1170

Customer: **Digital Path** 

Specification: 15.407(b) / 15.209 Radiated Spurious Emissions

Work Order #:92682Date:6/1/2012Test Type:Radiated ScanTime:16:30:00Equipment:5GHz Panel (18dBi) + Omni (11dBi)Sequence#:207Manufacturer:Digital PathTested By:E. Wong

Model: G5RL10G S/N: EMI 2

## Test Equipment:

| Test Equi | pincente |                   |                 |                  |              |
|-----------|----------|-------------------|-----------------|------------------|--------------|
| ID        | Asset #  | Description       | Model           | Calibration Date | Cal Due Date |
| T1        | AN02668  | Spectrum Analyzer | E4446A          | 2/23/2011        | 2/23/2013    |
| T2        | AN02157  | Horn Antenna-ANSI | 3115            | 1/17/2011        | 1/17/2013    |
|           |          | C63.5             |                 |                  |              |
| T3        | AN03302  | Cable             | 32026-29094K-   | 3/21/2012        | 3/21/2014    |
|           |          |                   | 29094K-72TC     |                  |              |
| T4        | ANP01210 | Cable             | FSJ1P-50A-4A    | 3/15/2011        | 3/15/2013    |
| T5        | ANP05913 | Cable             | 32022-29094K-   | 8/30/2011        | 8/30/2013    |
|           |          |                   | 65TC            |                  |              |
| T6        | AN03114  | Preamp            | AMF-7D-         | 5/13/2011        | 5/13/2013    |
|           |          |                   | 00101800-30-10P |                  |              |
|           | ANP05935 | Attenuator        | 84A-10          | 10/19/2011       | 10/19/2013   |
|           | ANP01211 | Attenuator        | 23-10-34        | 4/15/2011        | 4/15/2013    |
| T7        | AN01417  | High Pass Filter  | 84300-80039     | 2/9/2012         | 2/9/2014     |
| T8        | AN02694  | Active Horn       | AMFW-5F-        | 11/10/2010       | 11/10/2012   |
|           |          | Antenna-ANSI      | 18002650-20-10P |                  |              |
|           |          | C63.5 Antenna     |                 |                  |              |
|           |          | Factors (dB)      |                 |                  |              |
|           | AN02695  | Active Horn       | AMFW-5F-        | 11/10/2010       | 11/10/2012   |
|           |          | Antenna-ANSI      | 260400-33-8P    |                  |              |
|           |          | C63.5 Antenna     |                 |                  |              |
|           |          | Factors (dB)      |                 |                  |              |
| Т9        | ANP05911 | Cable             | 32022-29094K-   | 8/30/2011        | 8/30/2013    |
|           |          |                   | 65TC            |                  |              |
|           | AN00432  | Loop Antenna      | 6502            | 3/31/2011        | 3/31/2013    |
|           | AN00730  | Preamp            |                 | 1/31/2011        | 1/31/2013    |
|           | AN00852  | Biconilog Antenna | CBL 6111C       | 11/16/2010       | 11/16/2012   |
|           | ANP05299 | Cable             | RG214           | 3/6/2011         | 3/6/2013     |
|           | ANP05300 | Cable             | RG214/U         | 3/7/2011         | 3/7/2013     |
|           | ANP05440 | Cable             |                 | 3/7/2011         | 3/7/2013     |

## Equipment Under Test (\* = EUT):

| Equipment Citate Test ( | 201).        |         |       |  |
|-------------------------|--------------|---------|-------|--|
| Function                | Manufacturer | Model # | S/N   |  |
| 5GHz Panel (18dBi) +    | Digital Path | G5RL10G | EMI 2 |  |
| Omni (11dBi)*           |              |         |       |  |

## Support Devices:

| Function            | Manufacturer | Model #       | S/N             |
|---------------------|--------------|---------------|-----------------|
| Laptop Computer     | HP           | ProBook 6565b | 5CB13637ZF      |
| Laptop Power Supply | HP           | 608428-002    | F12941126327228 |

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## Test Conditions / Notes:

The EUT installed on a pole as intended. DC power port is connected to a DC power supply via a CAT5 cable. The Ethernet port is connected to a remote laptop via unshielded twisted pair.

The Remote laptop is running test software to exercise the intended functionalities. Receiver circuit is activated.

11dBi Omni antenna is connected to radio 0 (instance 1)

18 dBi panel antenna is connected to radio1 (instance 2)

This data sheet is for the EUT transmitting via 11dBi Omni antenna connected to radio 0 (instance 1)

Freq = 5470-5725MHz

5495MHz, 5590MHz, 5705MHz.

BW = 10 MHz

802.11a: 24Mbps, TX power setting= 17, 18.5, 18.5

802.11n: 13MCSHT20 2S,TX power setting= 17, 18.5, 17.5

Freq: 5500MHz, 5590MHz, 5700MHz.

BW = 20MHz

802.11a: 9 Mbps, TX power setting= 17, 19, 16.5

802.11n: 6.5MCS HT20 1S, TX power setting= 16.5, 19, 16.5

Temperature: 21.9°C, Relative Humidity: 38-43%, Atmospheric Pressure: 101.5kPa

Frequency range of measurement = 9kHz-40GHz.

9 kH -150 kHz; RBW=200 Hz, VBW=200 Hz;150 kHz-30 MHz; RBW=9 kHz, VBW=9 kHz;30 MHz-1000 MHz; RBW=120 kHz, VBW=120 kHz,1000 MHz-40,000 MHz; RBW=1 MHz, VBW=1 MHz.

Recorded emission level is below the EIRP limit of -27dBm/MHz (68.2dBuV/m @ 3 meter) IAW 789033 D01 General UNII Test Procedures V01r01

Ext Attn: 0 dB

| Meas | urement Data: | Re        | eading lis | ted by ma | argin. | Test Distance: 3 Meters |       |             |             |        |       |
|------|---------------|-----------|------------|-----------|--------|-------------------------|-------|-------------|-------------|--------|-------|
| #    | Freq          | Rdng      | T1         | T2        | Т3     | T4                      | Dist  | Corr        | Spec        | Margin | Polar |
|      |               |           | T5         | T6        | T7     | T8                      |       |             |             |        |       |
|      |               |           | T9         |           |        |                         |       |             |             |        |       |
|      | MHz           | $dB\mu V$ | dB         | dB        | dB     | dB                      | Table | $dB\mu V/m$ | $dB\mu V/m$ | dB     | Ant   |
| 1    | 22820.000     | 64.3      | +0.0       | +0.0      | +0.0   | +0.0                    | +0.0  | 52.1        | 54.0        | -1.9   | Horiz |
|      | M             |           | +0.0       | +0.0      | +0.0   | -16.5                   |       |             |             |        |       |
|      | Ave           |           | +4.3       |           |        |                         |       |             | 10MHz 80    | 2.11a  |       |
|      |               |           |            |           |        |                         |       |             | 24Mbps      |        |       |
| 2    | 2 22820.000   | 63.6      | +0.0       | +0.0      | +0.0   | +0.0                    | +0.0  | 51.4        | 54.0        | -2.6   | Horiz |
|      | M             |           | +0.0       | +0.0      | +0.0   | -16.5                   |       |             |             |        |       |
|      | Ave           |           | +4.3       |           |        |                         |       |             | 10MHz 80    | 2.11n  |       |
|      |               |           |            |           |        |                         |       |             | 13MCSHT     | C202S  |       |
| /    | 22820.000     | 77.5      | +0.0       | +0.0      | +0.0   | +0.0                    | +0.0  | 65.3        | 54.0        | +11.3  | Horiz |
|      | M             |           | +0.0       | +0.0      | +0.0   | -16.5                   |       |             |             |        |       |
|      |               |           | +4.3       |           |        |                         |       |             | 10MHz 80    | 2.11a  |       |
|      |               |           |            |           |        |                         |       |             | 24Mbps      |        |       |
| /    | 22820.000     | 76.3      | +0.0       | +0.0      | +0.0   | +0.0                    | +0.0  | 64.1        | 54.0        | +10.1  | Horiz |
|      | M             |           | +0.0       | +0.0      | +0.0   | -16.5                   |       |             |             |        |       |
|      |               |           | +4.3       |           |        |                         |       |             | 10MHz 80    | 2.11n  |       |
|      |               |           |            |           |        |                         |       |             | 13MCSHT     | C202S  |       |

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| S 22800.000  |              |              |      |         |        |       |      |                     |            |         |       |
|--|--------------|--------------|------|---------|--------|-------|------|---------------------|------------|---------|-------|
| Ave  |              | 63.2         |      |         |        |       | +0.0 | 51.0                | 54.0       | -3.0    | Horiz |
| Color  |              |              |      | +0.0    | +0.0   | -16.5 |      |                     |            |         |       |
| Column   | Ave          |              | +4.3 |         |        |       |      |                     |            | 2.11a   |       |
| March   House   Hous |              |              |      |         |        |       |      |                     |            |         |       |
| Ave  |              | 62.9         |      |         |        |       | +0.0 | 50.7                | 54.0       | -3.3    | Horiz |
| A 22800.000  |              |              |      | +0.0    | +0.0   | -16.5 |      |                     |            |         |       |
| A 22800.000  | Ave          |              | +4.3 |         |        |       |      |                     |            |         |       |
| M         +0.0         +0.0         +0.0         -16.5         20MHz 802.11a         24Mbps           ^ 22800.000         72.8         +0.0         +0.0         +0.0         +0.0         +0.0         60.6         54.0         +6.6         Horiz           M         +0.0         +0.0         +0.0         -16.5         20MHz 802.11n         6.5MCSHT201S           9 11410.000         56.1         +0.0         +38.8         +2.3         +6.9         +0.0         49.2         54.0         -4.8         Horiz           Ave         +0.0         +0.0         +0.0         10MHz 24Mbps         10MHz 24Mbps           Ave         +0.0         +39.1         +2.3         +6.8         +0.0         48.4         54.0         -5.6         Horiz           Ave         +0.0         +39.1         +2.3         +6.8         +0.0         61.2         54.0         +7.2         Horiz           M         +2.2         -57.3         +0.0         +0.0         10MHz         13MCSHT202S           12 11398.000         55.3         +0.0         +38.8         +2.3         +6.9         +0.0         48.3         54.0         -5.7         Horiz           Ave  |              |              |      |         |        |       |      |                     |            |         |       |
| Color  |              | 74.5         |      |         |        |       | +0.0 | 62.3                | 54.0       | +8.3    | Horiz |
| A 22800.000  | M            |              |      | +0.0    | +0.0   | -16.5 |      |                     |            |         |       |
| A 22800.000  |              |              | +4.3 |         |        |       |      |                     |            | 2.11a   |       |
| M       +0.0       +0.0       +0.0       -16.5       20MHz 802.11n       6.5MCSHT201S         9 11410.000       56.1       +0.0       +38.8       +2.3       +6.9       +0.0       49.2       54.0       -4.8       Horiz         M       +2.2       -57.1       +0.0       +0.0       10MHz 24Mbps       10MHz 24Mbps         10 11180.000       55.3       +0.0       +39.1       +2.3       +6.8       +0.0       48.4       54.0       -5.6       Horiz         Ave       +0.0       +2.2       -57.3       +0.0       +0.0       10MHz       13MCSHT202S         ^ 11180.000       68.1       +0.0       +39.1       +2.3       +6.8       +0.0       61.2       54.0       +7.2       Horiz         M       +2.2       -57.3       +0.0       +0.0       10MHz       13MCSHT202S         12 11398.000       55.3       +0.0       +38.8       +2.3       +6.9       +0.0       48.3       54.0       -5.7       Horiz         Ave       +0.0       +2.2       -57.2       +0.0       +0.0       20MHz 802.11n       6.5MCSHT201S         14 11399.700       55.0       +0.0       +38.8       +2.3       +6.9  |              |              |      |         |        |       |      |                     |            |         |       |
| 14.3   20MHz 802.11n   6.5MCSHT201S  |              | 72.8         |      |         |        |       | +0.0 | 60.6                | 54.0       | +6.6    | Horiz |
| 9 11410.000 56.1 +0.0 +38.8 +2.3 +6.9 +0.0 49.2 54.0 -4.8 Horiz  M   | M            |              |      | +0.0    | +0.0   | -16.5 |      |                     |            |         |       |
| 9 11410.000  |              |              | +4.3 |         |        |       |      |                     |            |         |       |
| M Ave         +2.2 bigs         -57.1 bigs         +0.0 bigs         +0.0 bigs         10 II180.000 bigs         55.3 bigs         +0.0 bigs         +2.2 bigs         +2.3 bigs         +6.8 bigs         +0.0 bigs         48.4 bigs         54.0 bigs         -5.6 bigs         Horiz           Ave         +0.0 bigs         +0.0 bigs </td <td></td>  |              |              |      |         |        |       |      |                     |            |         |       |
| Ave  |              | 56.1         |      |         |        |       | +0.0 | 49.2                | 54.0       | -4.8    | Horiz |
| 10   11180.000   55.3   +0.0   +39.1   +2.3   +6.8   +0.0   48.4   54.0   -5.6   Horiz   M   +2.2   -57.3   +0.0   +0.0   Horiz   10MHz   13MCSHT202S  | M            |              |      | -57.1   | +0.0   | +0.0  |      |                     |            |         |       |
| M       +2.2       -57.3       +0.0       +0.0       10MHz 13MCSHT202S         ^ 11180.000       68.1       +0.0       +39.1       +2.3       +6.8       +0.0       61.2       54.0       +7.2       Horiz         M       +2.2       -57.3       +0.0       +0.0       10MHz 13MCSHT202S       10MHz 13MCSHT202S         12 11398.000       55.3       +0.0       +38.8       +2.3       +6.9       +0.0       48.3       54.0       -5.7       Horiz         Ave       +0.0       +38.8       +2.3       +6.9       +0.0       61.0       54.0       +7.0       Horiz         M       +2.2       -57.2       +0.0       +0.0       61.0       54.0       +7.0       Horiz         M       +2.2       -57.2       +0.0       +0.0       61.0       54.0       +7.0       Horiz         M       +2.2       -57.2       +0.0       +0.0       20MHz 802.11n       6.5MCSHT201S         14 11399.700       55.0       +0.0       +38.8       +2.3       +6.9       +0.0       48.0       54.0       -6.0       Horiz         Ave       +0.0       +38.8       +2.3       +6.9       +0.0       48.0       54.0 </td <td></td>  |              |              |      |         |        |       |      |                     |            |         |       |
| Ave  |              | 55.3         |      |         |        |       | +0.0 | 48.4                | 54.0       | -5.6    | Horiz |
| 13MCSHT202S   13MCSHT202S   10MHz   13MCSHT202S   10MHz   13MCSHT202S   10MHz   13MCSHT202S   10MHz   13MCSHT202S   10MHz   13MCSHT202S   12 11398.000   55.3  | M            |              |      | -57.3   | +0.0   | +0.0  |      |                     |            |         |       |
| ^ 11180.000 68.1   | Ave          |              | +0.0 |         |        |       |      |                     |            |         |       |
| M  |              |              |      |         |        |       |      |                     |            |         |       |
| +0.0   |              | 68.1         |      |         |        |       | +0.0 | 61.2                | 54.0       | +7.2    | Horiz |
| 13MCSHT202S   1398.000   55.3   +0.0   +38.8   +2.3   +6.9   +0.0   48.3   54.0   -5.7   Horiz   M   +2.2   -57.2   +0.0   +0.0   20MHz 802.11n   6.5MCSHT201S   | M            |              |      | -57.3   | +0.0   | +0.0  |      |                     |            |         |       |
| 12   11398.000   55.3   +0.0   +38.8   +2.3   +6.9   +0.0   48.3   54.0   -5.7   Horiz   M   +2.2   -57.2   +0.0   +0.0   20MHz 802.11n   6.5MCSHT201S   M   +2.2   -57.2   +0.0   +0.0   +0.0   20MHz 802.11n   6.5MCSHT201S   M   +2.2   -57.2   +0.0   +0.0   20MHz 802.11n   6.5MCSHT201S   M   +2.2   -57.2   +0.0   +0.0   20MHz 802.11n   6.5MCSHT201S   M   +2.2   -57.2   +0.0   +0.0   +0.0   20MHz 802.11n   6.5MCSHT201S   M   +2.2   -57.2   +0.0   +0.0   +0.0   20MHz   6.5MCSHT201S   M   +2.2   -57.2   +0.0   +0.0   +0.0   60.6   54.0   +6.6   Horiz   M   +2.2   -57.2   +0.0   +0.0   +0.0   20MHz   6.5MCSHT201S   M   +2.2   -57.2   +0.0   +0.0   +0.0   20MHz   6.5MCSHT201S   M   +0.0   +0.0   +0.0   +0.0   +0.0   +0.0   47.9   54.0   -6.1   Horiz   M   +0.0   +0.0   +0.0   +0.0   +0.0   +0.0   +0.0   47.9   54.0   -6.1   Horiz   M   +0.0   +0.0   +0.0   +0.0   +0.0   +0.0   47.5   54.0   -6.5   Horiz   M   +2.2   -57.3   +0.0   +0.0   47.5   54.0   -6.5   Horiz   M   +2.2   -57.3   +0.0   +0.0   47.5   54.0   -6.5   Horiz   M   +2.2   -57.3   +0.0   +0.0   47.5   54.0   -6.5   Horiz   M   +2.2   -57.3   +0.0   +0.0   47.5   54.0   -6.5   Horiz   M   +2.2   -57.3   +0.0   +0.0   47.5   54.0   -6.5   Horiz   M   +2.2   -57.3   +0.0   +0.0   +0.0   47.5   54.0   -6.5   Horiz   M   +2.2   -57.3   +0.0  |              |              | +0.0 |         |        |       |      |                     |            |         |       |
| M  |              |              |      |         |        |       |      |                     |            |         |       |
| Ave  |              | 55.3         |      |         |        |       | +0.0 | 48.3                | 54.0       | -5.7    | Horiz |
| 11398.000  |              |              |      | -57.2   | +0.0   | +0.0  |      |                     |            |         |       |
| ^ 11398.000       68.0       +0.0       +38.8       +2.3       +6.9       +0.0       61.0       54.0       +7.0       Horiz         M       +2.2       -57.2       +0.0       +0.0       20MHz 802.11n       6.5MCSHT201S         14 11399.700       55.0       +0.0       +38.8       +2.3       +6.9       +0.0       48.0       54.0       -6.0       Horiz         Ave       +0.0       +2.2       -57.2       +0.0       +0.0       20MHz       6.5MCSHT201S         ^ 11399.700       67.6       +0.0       +38.8       +2.3       +6.9       +0.0       60.6       54.0       +6.6       Horiz         M       +2.2       -57.2       +0.0       +0.0       +0.0       20MHz       6.5MCSHT201S         16 22360.000       59.8       +0.0       +0.0       +0.0       +0.0       +0.0       47.9       54.0       -6.1       Horiz         Ave       +4.3       10MHz 802.11a       24Mbps         17 11184.200       54.4       +0.0       +39.1       +2.3       +6.8       +0.0       47.5       54.0       -6.5       Horiz         M       +2.2       -57.3       +0.0       +0.0       47.5 <t< td=""><td>Ave</td><td></td><td>+0.0</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>  | Ave          |              | +0.0 |         |        |       |      |                     |            |         |       |
| M  |              |              |      |         |        |       |      |                     |            |         |       |
| +0.0 |              | 68.0         |      |         |        |       | +0.0 | 61.0                | 54.0       | +7.0    | Horiz |
| 14   11399.700   55.0   +0.0   +38.8   +2.3   +6.9   +0.0   48.0   54.0   -6.0   Horiz     M   | M            |              |      | -57.2   | +0.0   | +0.0  |      |                     |            |         |       |
| 14 11399.700       55.0       +0.0       +38.8       +2.3       +6.9       +0.0       48.0       54.0       -6.0       Horiz         Ave       +0.0       +0.0       +0.0       +0.0       +0.0       20MHz       6.5MCSHT201S         ^ 11399.700       67.6       +0.0       +38.8       +2.3       +6.9       +0.0       60.6       54.0       +6.6       Horiz         M       +2.2       -57.2       +0.0       +0.0       20MHz       6.5MCSHT201S         16 22360.000       59.8       +0.0       +0.0       +0.0       +0.0       +0.0       47.9       54.0       -6.1       Horiz         Ave       +4.3       10MHz 802.11a       24Mbps         17 11184.200       54.4       +0.0       +39.1       +2.3       +6.8       +0.0       47.5       54.0       -6.5       Horiz         M       +2.2       -57.3       +0.0       +0.0       20MHz       20MHz   |              |              | +0.0 |         |        |       |      |                     |            |         |       |
| M       +2.2       -57.2       +0.0       +0.0         Ave       +0.0       +0.0       +0.0       +0.0       20MHz       6.5MCSHT201S         ^ 11399,700       67.6       +0.0       +38.8       +2.3       +6.9       +0.0       60.6       54.0       +6.6       Horiz         M       +2.2       -57.2       +0.0       +0.0       20MHz       6.5MCSHT201S         16 22360,000       59.8       +0.0       +0.0       +0.0       +0.0       47.9       54.0       -6.1       Horiz         Ave       +4.3       10MHz 802.11a       24Mbps         17 11184,200       54.4       +0.0       +39.1       +2.3       +6.8       +0.0       47.5       54.0       -6.5       Horiz         M       +2.2       -57.3       +0.0       +0.0       20MHz   | 44 44200 700 | <b></b>      | 6.0  | 20.0    |        |       | 0.0  | 40.0                |            |         | ** .  |
| Ave  |              | 55.0         |      |         |        |       | +0.0 | 48.0                | 54.0       | -6.0    | Horiz |
| A  |              |              |      | -57.2   | +0.0   | +0.0  |      |                     | 201/47     |         |       |
| ^ 11399.700 67.6 +0.0 +38.8 +2.3 +6.9 +0.0 60.6 54.0 +6.6 Horiz M +2.2 -57.2 +0.0 +0.0 +0.0 20MHz 6.5MCSHT201S  16 22360.000 59.8 +0.0 +0.0 +0.0 +0.0 +0.0 47.9 54.0 -6.1 Horiz M +0.0 +0.0 +0.0 -16.2 Ave +4.3 10MHz 802.11a 24Mbps  17 11184.200 54.4 +0.0 +39.1 +2.3 +6.8 +0.0 47.5 54.0 -6.5 Horiz M +2.2 -57.3 +0.0 +0.0 Ave +0.0 20MHz   | Ave          |              | +0.0 |         |        |       |      |                     |            | 2010    |       |
| M +2.2 -57.2 +0.0 +0.0   | A 11200 F00  | 67.6         | .0.0 | . 20. 0 | . 2 2  |       | .0.0 | <i>(</i> 0 <i>(</i> |            |         | TT .  |
| +0.0  16 22360.000 59.8 +0.0 +0.0 +0.0 +0.0 +0.0 47.9 54.0 -6.1 Horiz  M +0.0 +0.0 +0.0 -16.2  Ave +4.3 10MHz 802.11a 24Mbps  17 11184.200 54.4 +0.0 +39.1 +2.3 +6.8 +0.0 47.5 54.0 -6.5 Horiz  M +2.2 -57.3 +0.0 +0.0  Ave +0.0 20MHz   |              | 67.6         |      |         |        |       | +0.0 | 60.6                | 54.0       | +6.6    | Horiz |
| 16 22360.000 59.8 +0.0 +0.0 +0.0 +0.0 +0.0 47.9 54.0 -6.1 Horiz  M +0.0 +0.0 +0.0 -16.2  Ave +4.3 10MHz 802.11a 24Mbps  17 11184.200 54.4 +0.0 +39.1 +2.3 +6.8 +0.0 47.5 54.0 -6.5 Horiz  M +2.2 -57.3 +0.0 +0.0  Ave +0.0 20MHz   | M            |              |      | -57.2   | +0.0   | +0.0  |      |                     | 201411     |         |       |
| 16 22360.000 59.8 +0.0 +0.0 +0.0 +0.0 +0.0 47.9 54.0 -6.1 Horiz  M +0.0 +0.0 +0.0 -16.2  Ave +4.3 10MHz 802.11a 24Mbps  17 11184.200 54.4 +0.0 +39.1 +2.3 +6.8 +0.0 47.5 54.0 -6.5 Horiz  M +2.2 -57.3 +0.0 +0.0  Ave +0.0 20MHz   |              |              | +0.0 |         |        |       |      |                     |            | 2010    |       |
| M +0.0 +0.0 +0.0 -16.2<br>Ave +4.3 10MHz 802.11a<br>24Mbps<br>17 11184.200 54.4 +0.0 +39.1 +2.3 +6.8 +0.0 47.5 54.0 -6.5 Horiz<br>M +2.2 -57.3 +0.0 +0.0<br>Ave +0.0 20MHz   | 16 00000 000 | <b>50.0</b>  | .00  | . 0. 0  | . 0. 0 | .00   | .0.0 | 47.0                |            |         | TT. * |
| Ave +4.3 10MHz 802.11a 24Mbps  17 11184.200 54.4 +0.0 +39.1 +2.3 +6.8 +0.0 47.5 54.0 -6.5 Horiz  M +2.2 -57.3 +0.0 +0.0  Ave +0.0 20MHz  |              | 39.8         |      |         |        |       | +0.0 | 47.9                | 54.0       | -0.1    | Horiz |
| 24Mbps  17 11184.200 54.4 +0.0 +39.1 +2.3 +6.8 +0.0 47.5 54.0 -6.5 Horiz  M +2.2 -57.3 +0.0 +0.0  Ave +0.0 20MHz   |              |              |      | +0.0    | +0.0   | -16.2 |      |                     | 101/11 000 | 11.     |       |
| 17 11184.200 54.4 +0.0 +39.1 +2.3 +6.8 +0.0 47.5 54.0 -6.5 Horiz  M +2.2 -57.3 +0.0 +0.0  Ave +0.0 20MHz   | Ave          |              | +4.3 |         |        |       |      |                     |            | z.11a   |       |
| M $+2.2$ $-57.3$ $+0.0$ $+0.0$<br>Ave $+0.0$ 20MHz   | 17 11104 200 | <i>5 4 4</i> | .00  | . 20. 1 | . 2. 2 | 0     | .0.0 | 47.5                |            | <i></i> | TT. * |
| Ave $+0.0$ 20MHz   |              | 54.4         |      |         |        |       | +0.0 | 47.5                | 54.0       | -6.5    | Horiz |
|  |              |              |      | -5/.3   | +0.0   | +0.0  |      |                     | 201411     |         |       |
| 6.5MCSH1201S   | Ave          |              | +0.0 |         |        |       |      |                     |            | 2016    |       |
|  |              |              |      |         |        |       |      |                     | 0.3MCSH1   | 2015    |       |

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| ^ 11184.200       | 67.5         | +0.0         | +39.1          | +2.3         | +6.8 | +0.0  | 60.6         | 54.0       | +6.6       | Horiz       |
|-------------------|--------------|--------------|----------------|--------------|------|-------|--------------|------------|------------|-------------|
| M                 |              | +2.2         | -57.3          | +0.0         | +0.0 |       |              |            |            |             |
|                   |              | +0.0         |                |              |      |       |              | 20MHz      | 2010       |             |
| 10 11100 000      |              | 0.0          | 20.1           | 2.2          |      | 0.0   | 47.5         | 6.5MCSHT   |            | X7 .        |
| 19 11180.000      | 54.4         | +0.0         | +39.1          | +2.3         | +6.8 | +0.0  | 47.5         | 54.0       | -6.5       | Vert        |
| M<br>Ave          |              | +2.2 +0.0    | -57.3          | +0.0         | +0.0 |       |              | 10MHz      |            |             |
| Ave               |              | +0.0         |                |              |      |       |              | 13MCSHT2   | 202S       |             |
| 20 10998.600      | 54.6         | +0.0         | +39.4          | +2.3         | +6.8 | +0.0  | 47.3         |            | -6.7       | Horiz       |
| M                 | •            | +2.2         | -58.0          | +0.0         | +0.0 |       |              |            |            |             |
| Ave               |              | +0.0         |                |              |      |       |              | 20MHz      |            |             |
|                   |              |              |                |              |      |       |              | 6.5MCSHT   | 201S       |             |
| ^ 10998.600       | 66.8         | +0.0         | +39.4          | +2.3         | +6.8 | +0.0  | 59.5         | 54.0       | +5.5       | Horiz       |
| M                 |              | +2.2         | -58.0          | +0.0         | +0.0 |       |              |            |            |             |
|                   |              | +0.0         |                |              |      |       |              | 20MHz      |            |             |
|                   |              |              |                |              |      |       |              | 6.5MCSHT   |            |             |
| 22 10989.200      | 54.4         | +0.0         | +39.4          | +2.3         | +6.8 | +0.0  | 47.1         | 54.0       | -6.9       | Vert        |
| M                 |              | +2.2         | -58.0          | +0.0         | +0.0 |       |              |            |            |             |
| Ave               |              | +0.0         | 20.4           | 2.2          |      | 0.0   | <b>7</b> 0.0 | 10MHz 24N  | _          | **          |
| ^ 10989.200       | 66.1         | +0.0         | +39.4          | +2.3         | +6.8 | +0.0  | 58.8         | 54.0       | +4.8       | Vert        |
| M                 |              | +2.2         | -58.0          | +0.0         | +0.0 |       |              | 101/11 241 | <b>(1)</b> |             |
| 24 11207 (00      | <i>52.</i> 0 | +0.0         | 120.0          | +2.3         | +6.9 | .00   | 46.0         | 10MHz 24N  | 7.1        | <b>V</b> 74 |
| 24 11397.600<br>M | 53.9         | +0.0<br>+2.2 | +38.8<br>-57.2 | +2.3<br>+0.0 | +0.9 | +0.0  | 46.9         | 54.0       | -/.1       | Vert        |
| Ave               |              | +2.2 $+0.0$  | -31.2          | +0.0         | +0.0 |       |              | 20MHz 802  | ) 11n      |             |
| Ave               |              | +0.0         |                |              |      |       |              | 6.5MCSHT   |            |             |
| ^ 11397.600       | 67.6         | +0.0         | +38.8          | +2.3         | +6.9 | +0.0  | 60.6         |            |            | Vert        |
| M                 | 07.0         | +2.2         | -57.2          | +0.0         | +0.0 | 10.0  | 00.0         | 31.0       | 10.0       | VOIT        |
|                   |              | +0.0         |                |              |      |       |              | 20MHz 802  | 2.11n      |             |
|                   |              |              |                |              |      |       |              | 6.5MCSHT   | 201S       |             |
| 26 10990.900      | 54.2         | +0.0         | +39.4          | +2.3         | +6.8 | +0.0  | 46.9         | 54.0       | -7.1       | Vert        |
| M                 |              | +2.2         | -58.0          | +0.0         | +0.0 |       |              |            |            |             |
| Ave               |              | +0.0         |                |              |      |       |              | 10MHz      |            |             |
|                   |              |              |                |              |      |       |              | 13MCSHT2   | 202S       |             |
| ^ 10990.900       | 66.6         | +0.0         | +39.4          | +2.3         | +6.8 | +0.0  | 59.3         | 54.0       | +5.3       | Vert        |
| M                 |              | +2.2         | -58.0          | +0.0         | +0.0 |       |              | 403.677    |            |             |
|                   |              | +0.0         |                |              |      |       |              | 10MHz      | 2020       |             |
| 20 11410 000      | F2 4         | .00          | . 20. 0        | .0.2         |      | .0.0  | 46.5         | 13MCSHT2   |            | TT. *       |
| 28 11410.000      | 53.4         |              | +38.8          | +2.3         | +6.9 | +0.0  | 46.5         | 54.0       | -7.5       | Horiz       |
| M<br>Ave          |              | +2.2 +0.0    | -57.1          | +0.0         | +0.0 |       |              | 10MHz      |            |             |
| Ave               |              | +0.0         |                |              |      |       |              | 13MCSHT2   | 2028       |             |
| ^ 11410.000       | 67.6         | +0.0         | +38.8          | +2.3         | +6.9 | +0.0  | 60.7         |            | +6.7       | Horiz       |
| M                 | 07.0         | +2.2         | +38.8<br>-57.1 | +0.0         | +0.9 | 10.0  | 00.7         | 54.0       | 10.7       | 110112      |
| 1/1               |              | +0.0         | 57.1           | . 0.0        | 10.0 |       |              | 10MHz 24N  | Mbps       |             |
| ^ 11410.000       | 65.7         | +0.0         | +38.8          | +2.3         | +6.9 | +0.0  | 58.8         |            | -          | Horiz       |
| M                 | 55.7         | +2.2         | -57.1          | +0.0         | +0.0 | . 0.0 | 20.0         | 2 110      | . 1.0      |             |
|                   |              | +0.0         |                |              |      |       |              | 10MHz      |            |             |
|                   |              |              |                |              |      |       |              | 13MCSHT2   | 202S       |             |
|                   |              |              |                |              |      |       |              |            |            |             |

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| 31 22360.000 | 58.2  | +0.0           | +0.0           | +0.0      | +0.0          | +0.0  | 46.3        | 54.0             | -7.7    | Horiz       |
|--------------|-------|----------------|----------------|-----------|---------------|-------|-------------|------------------|---------|-------------|
| M            | 30.2  | +0.0           | +0.0           | +0.0 +0.0 | +0.0<br>-16.2 | +0.0  | 40.3        | 34.0             | -/./    | HOHZ        |
| Ave          |       | +4.3           | 10.0           | 10.0      | 10.2          |       |             | 10MHz 802        | 2 11n   |             |
| 1110         |       | 1 1.5          |                |           |               |       |             | 13MCSHT          |         |             |
| 32 11180.000 | 52.6  | +0.0           | +39.1          | +2.3      | +6.8          | +0.0  | 45.7        | 54.0             | -8.3    | Vert        |
| M            |       | +2.2           | -57.3          | +0.0      | +0.0          |       |             |                  |         |             |
| Ave          |       | +0.0           |                |           |               |       |             | 10MHz 241        | Mbps    |             |
| 33 11178.950 | 52.6  | +0.0           | +39.1          | +2.3      | +6.8          | +0.0  | 45.7        | 54.0             | -8.3    | Horiz       |
| M            |       | +2.2           | -57.3          | +0.0      | +0.0          |       |             |                  |         |             |
| Ave          |       | +0.0           |                |           |               |       |             | 10MHz 241        | Mbps    |             |
| ^ 11178.950  | 65.3  | +0.0           | +39.1          | +2.3      | +6.8          | +0.0  | 58.4        | 54.0             | +4.4    | Horiz       |
| M            |       | +2.2           | -57.3          | +0.0      | +0.0          |       |             |                  |         |             |
|              |       | +0.0           |                |           |               |       |             | 10MHz 241        |         |             |
| 35 10998.800 | 52.9  | +0.0           | +39.4          | +2.3      | +6.8          | +0.0  | 45.6        | 54.0             | -8.4    | Horiz       |
| M            |       | +2.2           | -58.0          | +0.0      | +0.0          |       |             | 201 (77 000      |         |             |
| Ave          |       | +0.0           |                |           |               |       |             | 20MHz 802        |         |             |
| A 10000 000  | (47   | .00            | . 20. 4        | .2.2      | 0             | .0.0  | 57 A        | 6.5MCSHT         |         | II.         |
| ^ 10998.800  | 64.7  | +0.0           | +39.4          | +2.3      | +6.8          | +0.0  | 57.4        | 54.0             | +3.4    | Horiz       |
| M            |       | $+2.2 \\ +0.0$ | -58.0          | +0.0      | +0.0          |       |             | 20MHz 802        | ) 11p   |             |
|              |       | +0.0           |                |           |               |       |             | 6.5MCSHT         |         |             |
| 37 11410.000 | 52.5  | +0.0           | +38.8          | +2.3      | +6.9          | +0.0  | 45.6        | 54.0             | -8.4    | Vert        |
| M            | J4.J  | +2.2           | +38.8<br>-57.1 | +2.3      | +0.9          | 10.0  | ₹3.0        | 54.0             | -0.4    | v CI t      |
| Ave          |       | +0.0           | 37.1           | 10.0      | 10.0          |       |             | 10MHz 241        | Mhns    |             |
| 38 10989.200 | 52.8  | +0.0           | +39.4          | +2.3      | +6.8          | +0.0  | 45.5        | 54.0             | -8.5    | Horiz       |
| M            | 32.0  | +2.2           | -58.0          | +0.0      | +0.0          | 10.0  | 10.0        | 2                | 0.0     | HOHE        |
| Ave          |       | +0.0           |                |           |               |       |             | 10MHz 241        | Mbps    |             |
| 39 22360.000 | 57.1  | +0.0           | +0.0           | +0.0      | +0.0          | +0.0  | 45.2        | 54.0             | -8.8    | Horiz       |
| M            |       | +0.0           | +0.0           | +0.0      | -16.2         |       |             |                  |         |             |
| Ave          |       | +4.3           |                |           |               |       |             | 20MHz 802        | 2.11a   |             |
|              |       |                |                |           |               |       |             | 24Mbps           |         |             |
| 40 11180.000 | 52.0  | +0.0           | +39.1          | +2.3      | +6.8          | +0.0  | 45.1        | 54.0             | -8.9    | Vert        |
| M            |       | +2.2           | -57.3          | +0.0      | +0.0          |       |             |                  |         |             |
| Ave          |       | +0.0           |                |           |               |       |             | 20MHz 802        |         |             |
|              |       |                |                |           |               |       |             | 6.5MCSHT         |         |             |
| 41 11180.000 | 51.9  | +0.0           | +39.1          | +2.3      | +6.8          | +0.0  | 45.0        | 54.0             | -9.0    | Vert        |
| M            |       | +2.2           | -57.3          | +0.0      | +0.0          |       |             | 201/11           |         |             |
| Ave          |       | +0.0           |                |           |               |       |             | 20MHz            | 2010    |             |
| A 11100 000  | (7.7  | .00            | . 20. 1        | . 2. 2    | 0             | .0.0  | <b>60.0</b> | 6.5MCSHT         |         | <b>T7</b> . |
| ^ 11180.000  | 67.7  | +0.0           | +39.1          | +2.3      | +6.8          | +0.0  | 60.8        | 54.0             | +6.8    | Vert        |
| M            |       | +2.2<br>+0.0   | -57.3          | +0.0      | +0.0          |       |             | 10MHz            |         |             |
|              |       | +0.0           |                |           |               |       |             | 10MHZ<br>13MCSHT | 2025    |             |
| ^ 11180.000  | 66.4  | +0.0           | +39.1          | +2.3      | +6.8          | +0.0  | 59.5        | 54.0             | +5.5    | Vert        |
| M            | 00.4  | +2.2           | +39.1<br>-57.3 | +2.3      | +0.8 $+0.0$   | 10.0  | 33.3        | 54.0             | 1 3.3   | v CI t      |
| 171          |       | +0.0           | 21.3           | 10.0      | 10.0          |       |             | 20MHz 802        | 2.11n   |             |
|              |       | . 0.0          |                |           |               |       |             | 6.5MCSHT         |         |             |
| ^ 11180.000  | 64.8  | +0.0           | +39.1          | +2.3      | +6.8          | +0.0  | 57.9        | 54.0             | +3.9    | Vert        |
| M            | 0 1.0 | +2.2           | -57.3          | +0.0      | +0.0          | . 0.0 | 27.5        | 2 110            | . 3.7   | . 510       |
| 1.2          |       | +0.0           | 27.0           | . 3.0     |               |       |             | 10MHz 241        | Mbps    |             |
| L            |       |                |                |           |               |       |             |                  | - r · · |             |

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| ٨  | 11180.000 | 64.1 | +0.0 | +39.1  | +2.3   | +6.8  | +0.0 | 57.2 | 54.0        | +3.2  | Vert  |
|----|-----------|------|------|--------|--------|-------|------|------|-------------|-------|-------|
|    | M         |      | +2.2 | -57.3  | +0.0   | +0.0  |      |      |             |       |       |
|    |           |      | +0.0 |        |        |       |      |      | 20MHz       |       |       |
|    |           |      |      |        |        |       |      |      | 6.5MCSHT    | 201S  |       |
| 46 | 11400.100 | 51.5 | +0.0 | +38.8  | +2.3   | +6.9  | +0.0 | 44.5 | 54.0        | -9.5  | Vert  |
|    | M         |      | +2.2 | -57.2  | +0.0   | +0.0  |      |      |             |       |       |
|    | Ave       |      | +0.0 |        |        |       |      |      | 20MHz       |       |       |
|    |           |      |      |        |        |       |      |      | 6.5MCSHT    | 201S  |       |
| ^  | 11400.100 | 64.6 | +0.0 | +38.8  | +2.3   | +6.9  | +0.0 | 57.6 | 54.0        | +3.6  | Vert  |
|    | M         |      | +2.2 | -57.2  | +0.0   | +0.0  |      |      |             |       |       |
|    |           |      | +0.0 |        |        |       |      |      | 20MHz       |       |       |
|    |           |      |      |        |        |       |      |      | 6.5MCSHT    | 201S  |       |
| 48 | 10989.200 | 51.8 | +0.0 | +39.4  | +2.3   | +6.8  | +0.0 | 44.5 | 54.0        | -9.5  | Horiz |
|    | M         |      | +2.2 | -58.0  | +0.0   | +0.0  |      |      |             |       |       |
|    | Ave       |      | +0.0 |        |        |       |      |      | 10MHz       |       |       |
|    |           |      |      |        |        |       |      |      | 13MCSHT2    | 202S  |       |
| ^  | 10989.200 | 64.7 | +0.0 | +39.4  | +2.3   | +6.8  | +0.0 | 57.4 | 54.0        | +3.4  | Horiz |
|    | M         |      | +2.2 | -58.0  | +0.0   | +0.0  |      |      |             |       |       |
|    |           |      | +0.0 |        |        |       |      |      | 10MHz 24N   | Mbps  |       |
| ^  | 10989.200 | 63.6 | +0.0 | +39.4  | +2.3   | +6.8  | +0.0 | 56.3 | 54.0        | +2.3  | Horiz |
|    | M         |      | +2.2 | -58.0  | +0.0   | +0.0  |      |      |             |       |       |
|    |           |      | +0.0 |        |        |       |      |      | 10MHz       |       |       |
|    |           |      |      |        |        |       |      |      | 13MCSHT2    | 202S  |       |
| 51 | 11178.200 | 50.8 | +0.0 | +39.1  | +2.3   | +6.8  | +0.0 | 43.9 | 54.0        | -10.1 | Horiz |
|    | M         |      | +2.2 | -57.3  | +0.0   | +0.0  |      |      |             |       |       |
|    | Ave       |      | +0.0 |        |        |       |      |      | 20MHz 802   |       |       |
|    |           |      |      |        |        |       |      |      | 6.5MCSHT    |       |       |
| ^  | 11178.200 | 64.0 | +0.0 | +39.1  | +2.3   | +6.8  | +0.0 | 57.1 | 54.0        | +3.1  | Horiz |
|    | M         |      | +2.2 | -57.3  | +0.0   | +0.0  |      |      |             |       |       |
|    |           |      | +0.0 |        |        |       |      |      | 20MHz 802   |       |       |
|    |           |      |      |        |        |       |      |      | 6.5MCSHT    |       |       |
| 53 | 10995.500 | 50.9 | +0.0 | +39.4  | +2.3   | +6.8  | +0.0 | 43.6 | 54.0        | -10.4 | Vert  |
|    | M         |      | +2.2 | -58.0  | +0.0   | +0.0  |      |      |             |       |       |
|    | Ave       |      | +0.0 |        |        |       |      |      | 20MHz 802   |       |       |
|    |           |      |      |        |        |       |      |      | 6.5MCSHT    |       |       |
| ^  | 10995.500 | 64.6 | +0.0 |        | +2.3   | +6.8  | +0.0 | 57.3 | 54.0        | +3.3  | Vert  |
|    | M         |      | +2.2 | -58.0  | +0.0   | +0.0  |      |      | 20147       |       |       |
|    |           |      | +0.0 |        |        |       |      |      | 20MHz 802   |       |       |
|    | 22260 000 |      |      |        | 0.0    | 0.0   | 0.0  | 42.7 | 6.5MCSHT    |       | ** .  |
| 55 | 22360.000 | 55.4 | +0.0 | +0.0   | +0.0   | +0.0  | +0.0 | 43.5 | 54.0        | -10.5 | Horiz |
|    | M         |      | +0.0 | +0.0   | +0.0   | -16.2 |      |      | 20144 002   |       |       |
|    | Ave       |      | +4.3 |        |        |       |      |      | 20MHz 802   |       |       |
|    | 22260 000 | 70.0 | .00  | . 0. 0 | . 0. 0 | .0.0  | .0.0 | CO 4 | 6.5MCSHT    |       | TT. * |
|    | 22360.000 | 72.3 | +0.0 | +0.0   | +0.0   | +0.0  | +0.0 | 60.4 | 54.0        | +6.4  | Horiz |
|    | M         |      | +0.0 | +0.0   | +0.0   | -16.2 |      |      | 101/11/1992 | 11.   |       |
|    |           |      | +4.3 |        |        |       |      |      | 10MHz 802   | z.11a |       |
|    | 22260 000 | 70.4 | .0.0 | . 0. 0 | . 0. 0 | .0.0  | .00  | 50.5 | 24Mbps      | . 4 ~ | TT. * |
|    | 22360.000 | 70.4 | +0.0 | +0.0   | +0.0   | +0.0  | +0.0 | 58.5 | 54.0        | +4.5  | Horiz |
|    | M         |      | +0.0 | +0.0   | +0.0   | -16.2 |      |      | 201411 002  | 11    |       |
|    |           |      | +4.3 |        |        |       |      |      | 20MHz 802   |       |       |
|    |           |      |      |        |        |       |      |      | 6.5MCSFT    | 2015  |       |

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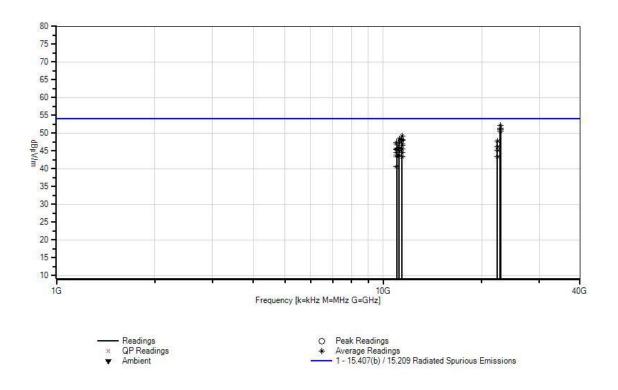


| ^ 22360.000  | 69.5 | +0.0 | +0.0  | +0.0 | +0.0  | +0.0 | 57.6 | 54.0      | +3.6  | Horiz |
|--------------|------|------|-------|------|-------|------|------|-----------|-------|-------|
| M            |      | +0.0 | +0.0  | +0.0 | -16.2 |      |      |           |       |       |
|              |      | +4.3 |       |      |       |      |      | 20MHz 802 | 2.11a |       |
|              |      |      |       |      |       |      |      | 24Mbps    |       |       |
| ^ 22360.000  | 69.1 | +0.0 | +0.0  | +0.0 | +0.0  | +0.0 | 57.2 | 54.0      | +3.2  | Horiz |
| M            |      | +0.0 | +0.0  | +0.0 | -16.2 |      |      |           |       |       |
|              |      | +4.3 |       |      |       |      |      | 10MHz 802 | 2.11n |       |
|              |      |      |       |      |       |      |      | 13MCSHT   |       |       |
| 60 11410.000 | 50.2 | +0.0 | +38.8 | +2.3 | +6.9  | +0.0 | 43.3 | 54.0      | -10.7 | Vert  |
| M            |      | +2.2 | -57.1 | +0.0 | +0.0  |      |      |           |       |       |
| Ave          |      | +0.0 |       |      |       |      |      | 10MHz     |       |       |
|              |      |      |       |      |       |      |      | 13MCSHT   | 202S  |       |
| ^ 11410.000  | 64.3 | +0.0 | +38.8 | +2.3 | +6.9  | +0.0 | 57.4 | 54.0      | +3.4  | Vert  |
| M            |      | +2.2 | -57.1 | +0.0 | +0.0  |      |      |           |       |       |
|              |      | +0.0 |       |      |       |      |      | 10MHz 24  | Mbps  |       |
| ^ 11410.000  | 62.7 | +0.0 | +38.8 | +2.3 | +6.9  | +0.0 | 55.8 | 54.0      | +1.8  | Vert  |
| M            |      | +2.2 | -57.1 | +0.0 | +0.0  |      |      |           |       |       |
|              |      | +0.0 |       |      |       |      |      | 10MHz     |       |       |
|              |      |      |       |      |       |      |      | 13MCSHT   | 202S  |       |
| 63 10994.950 | 47.9 | +0.0 | +39.4 | +2.3 | +6.8  | +0.0 | 40.6 | 54.0      | -13.4 | Vert  |
| M            |      | +2.2 | -58.0 | +0.0 | +0.0  |      |      |           |       |       |
| Ave          |      | +0.0 |       |      |       |      |      | 20MHz     |       |       |
|              |      |      |       |      |       |      |      | 6.5MCSHT  | C201S |       |
| ^ 10994.950  | 61.6 | +0.0 | +39.4 | +2.3 | +6.8  | +0.0 | 54.3 | 54.0      | +0.3  | Vert  |
| M            |      | +2.2 | -58.0 | +0.0 | +0.0  |      |      |           |       |       |
|              |      | +0.0 |       |      |       |      |      | 20MHz     |       |       |
|              |      |      |       |      |       |      |      | 6.5MCSHT  | C201S |       |
|              |      |      |       |      |       |      |      |           |       |       |

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CKC Laboratories, Inc. Date: 6/1/2012 Time: 16:30:00 Digital Path WO#: 92682 15.407(b) / 15.209 Radiated Spurious Emissions Test Distance: 3 Meters Sequence#: 207 Horiz UNII Bands. 20MHz Channel width.





Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • (510) 249 - 1170

Customer: **Digital Path** 

Specification: 15.407(b) / 15.209 Radiated Spurious Emissions

Work Order #:92682Date:6/3/2012Test Type:Radiated ScanTime:09:19:51Equipment:5GHz Panel (18dBi) + Omni (11dBi)Sequence#:210Manufacturer:Digital PathTested By:E. Wong

Model: G5RL10G S/N: EMI 2

#### Test Equipment:

| resi Equ | іртені.  |  |                              |                  |              |
|----------|----------|--|------------------------------|------------------|--------------|
| ID       | Asset #  | Description  | Model                        | Calibration Date | Cal Due Date |
| T1       | AN02668  | Spectrum Analyzer  | E4446A                       | 2/23/2011        | 2/23/2013    |
| T2       | AN02157  | Horn Antenna-ANSI<br>C63.5                                   | 3115                         | 1/17/2011        | 1/17/2013    |
| Т3       | AN03302  | Cable  | 32026-29094K-<br>29094K-72TC | 3/21/2012        | 3/21/2014    |
| T4       | ANP01210 | Cable  | FSJ1P-50A-4A                 | 3/15/2011        | 3/15/2013    |
| T5       | ANP05913 | Cable  | 32022-29094K-<br>65TC        | 8/30/2011        | 8/30/2013    |
| Т6       | AN03114  | Preamp   | AMF-7D-<br>00101800-30-10F   | 5/13/2011        | 5/13/2013    |
|          | ANP05935 | Attenuator   | 84A-10                       | 10/19/2011       | 10/19/2013   |
|          | ANP01211 | Attenuator   | 23-10-34                     | 4/15/2011        | 4/15/2013    |
| T7       | AN01417  | High Pass Filter   | 84300-80039                  | 2/9/2012         | 2/9/2014     |
| Т8       | AN02694  | Active Horn<br>Antenna-ANSI<br>C63.5 Antenna<br>Factors (dB) | AMFW-5F-<br>18002650-20-10F  | 11/10/2010       | 11/10/2012   |
|          | AN02695  | Active Horn<br>Antenna-ANSI<br>C63.5 Antenna<br>Factors (dB) | AMFW-5F-<br>260400-33-8P     | 11/10/2010       | 11/10/2012   |
| Т9       | ANP05911 | Cable  | 32022-29094K-<br>65TC        | 8/30/2011        | 8/30/2013    |
|          | AN00852  | Biconilog Antenna  | CBL 6111C                    | 11/16/2010       | 11/16/2012   |
|          | AN00730  | Preamp   |                              | 1/31/2011        | 1/31/2013    |
|          | ANP05299 | Cable  | RG214                        | 3/6/2011         | 3/6/2013     |
|          | ANP05300 | Cable  | RG214/U                      | 3/7/2011         | 3/7/2013     |
|          | ANP05440 | Cable  |                              | 3/7/2011         | 3/7/2013     |
|          |          |  |                              |                  |              |

## Equipment Under Test (\* = EUT):

| Function             | Manufacturer | Model # | S/N   |
|----------------------|--------------|---------|-------|
| 5GHz Panel (18dBi) + | Digital Path | G5RL10G | EMI 2 |
| Omni (11dBi)*        |              |         |       |

## Support Devices:

| Function            | Manufacturer | Model #       | S/N             |
|---------------------|--------------|---------------|-----------------|
| Laptop Computer     | HP           | ProBook 6565b | 5CB13637ZF      |
| Laptop Power Supply | HP           | 608428-002    | F12941126327228 |

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#### Test Conditions / Notes:

The EUT installed on a pole as intended. DC power port is connected to a DC power supply via a CAT5 cable. The Ethernet port is connected to a remote laptop via unshielded twisted pair.

The Remote laptop is running test software to exercise the intended functionalities. Receiver circuit is active.

11dBi Omni antenna is connected to radio 0 (instance 1) 18 dBi panel antenna is connected to radio1 (instance 2)

This data sheet is for the EUT transmitting via 18dBi Panel antenna connected to radio 1 (instance 2)

5470-5725MHz

Freq: 5495MHz, 5590MHz, 5705MHz.

BW = 10 MHz

802.11a: 24Mbps, TX power setting= 11, 11, 11

802.11n: 13MCS HT20 2S,TX power setting= 11, 11, 11

Freq: 5500MHz, 5590MHz, 5700MHz.

BW = 20MHz

802.11a: 24 Mbps, TX power setting= 13.5, 13.5, 12.5

802.11n: 6.5MCS HT20 1S, TX power setting= 13.5, 13.5, 11

Temperature: 21.9°C, Relative Humidity: 38-43%, Atmospheric Pressure: 101.5kPa

No emission found. Detection was performed with reduced resolution bandwidth, recorded data represent noise floor level at required BW.

Frequency range of measurement = 9kHz-40GHz.

9 kH -150 kHz; RBW=200 Hz, VBW=200 Hz;150 kHz-30 MHz; RBW=9 kHz, VBW=9 kHz;30 MHz-1000 MHz; RBW=120 kHz, VBW=120 kHz,1000 MHz-40,000 MHz; RBW=1 MHz, VBW=1 MHz.

Recorded emission level is below the EIRP limit of -27dBm/MHz (68.2dBuV/m @ 3 meter) IAW 789033 D01 General UNII Test Procedures V01r01

Ext Attn: 0 dB

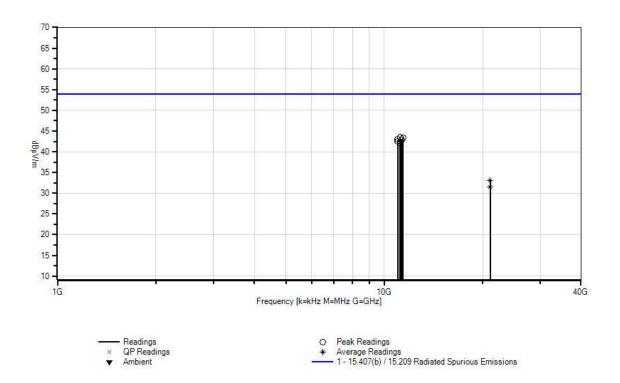
| Measu | rement Data: | Re   | eading lis | ted by ma | argin. |      | Т     | est Distance | e: 3 Meters |        |       |
|-------|--------------|------|------------|-----------|--------|------|-------|--------------|-------------|--------|-------|
| #     | Freq         | Rdng | T1         | T2        | Т3     | T4   | Dist  | Corr         | Spec        | Margin | Polar |
|       |              |      | T5         | T6        | T7     | T8   |       |              |             |        |       |
|       |              |      | T9         |           |        |      |       |              |             |        |       |
|       | MHz          | dΒμV | dB         | dB        | dB     | dB   | Table | $dB\mu V/m$  | $dB\mu V/m$ | dB     | Ant   |
| 1     | 11189.000    | 50.3 | +0.0       | +39.1     | +2.3   | +6.8 | +0.0  | 43.5         | 54.0        | -10.5  | Vert  |
|       | M            |      | +2.2       | -57.2     | +0.0   | +0.0 |       |              |             |        |       |
|       |              |      | +0.0       |           |        |      |       |              |             |        |       |
| 2     | 11407.900    | 50.2 | +0.0       | +38.8     | +2.3   | +6.9 | +0.0  | 43.3         | 54.0        | -10.7  | Vert  |
|       | M            |      | +2.2       | -57.1     | +0.0   | +0.0 |       |              |             |        |       |
|       |              |      | +0.0       |           |        |      |       |              |             |        |       |
| 3     | 10990.000    | 50.2 | +0.0       | +39.4     | +2.3   | +6.8 | +0.0  | 42.9         | 54.0        | -11.1  | Vert  |
|       | M            |      | +2.2       | -58.0     | +0.0   | +0.0 |       |              |             |        |       |
|       |              |      | +0.0       |           |        |      |       |              |             |        |       |
| 4     | 11290.000    | 49.6 | +0.0       | +39.0     | +2.3   | +6.9 | +0.0  | 42.8         | 54.0        | -11.2  | Horiz |
|       | M            |      | +2.2       | -57.2     | +0.0   | +0.0 |       |              |             |        |       |
|       |              |      | +0.0       |           |        |      |       |              |             |        |       |

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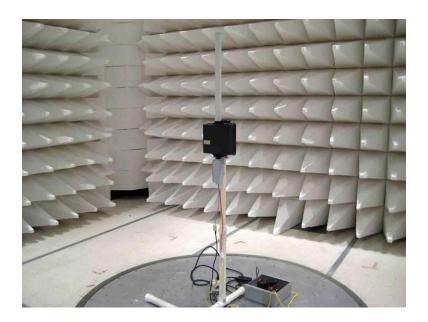
| <b>5</b> 11000 000 | 40.7 | . 0. 0 | +20.4 | .2.2 | 160   | . 0. 0 | 42.4 | 540  | 11.6  | II.   |
|--------------------|------|--------|-------|------|-------|--------|------|------|-------|-------|
| 5 11000.000        | 49.7 | +0.0   | +39.4 | +2.3 | +6.8  | +0.0   | 42.4 | 54.0 | -11.6 | Horiz |
| M                  |      | +2.2   | -58.0 | +0.0 | +0.0  |        |      |      |       |       |
|                    |      | +0.0   |       |      |       |        |      |      |       |       |
| 6 11180.000        | 49.0 | +0.0   | +39.1 | +2.3 | +6.8  | +0.0   | 42.1 | 54.0 | -11.9 | Horiz |
| M                  |      | +2.2   | -57.3 | +0.0 | +0.0  |        |      |      |       |       |
|                    |      | +0.0   |       |      |       |        |      |      |       |       |
| 7 21104.000        | 44.1 | +0.0   | +0.0  | +0.0 | +0.0  | +0.0   | 33.1 | 54.0 | -20.9 | Vert  |
| M                  |      | +0.0   | +0.0  | +0.0 | -15.1 |        |      |      |       |       |
| Ave                |      | +4.1   |       |      |       |        |      |      |       |       |
| ^ 21104.000        | 57.1 | +0.0   | +0.0  | +0.0 | +0.0  | +0.0   | 46.1 | 54.0 | -7.9  | Vert  |
| M                  |      | +0.0   | +0.0  | +0.0 | -15.1 |        |      |      |       |       |
|                    |      | +4.1   |       |      |       |        |      |      |       |       |
| 9 21104.000        | 42.5 | +0.0   | +0.0  | +0.0 | +0.0  | +0.0   | 31.5 | 54.0 | -22.5 | Horiz |
| M                  |      | +0.0   | +0.0  | +0.0 | -15.1 |        |      |      |       |       |
| Ave                |      | +4.1   |       |      |       |        |      |      |       |       |
| ^ 21104.000        | 56.6 | +0.0   | +0.0  | +0.0 | +0.0  | +0.0   | 45.6 | 54.0 | -8.4  | Horiz |
| M                  |      | +0.0   | +0.0  | +0.0 | -15.1 |        |      |      |       |       |
|                    |      | +4.1   |       |      |       |        |      |      |       |       |

CKC Laboratories, Inc. Date: 6/3/2012 Time: 09:19:51 Digital Path WO#: 92682 15.407(b) / 15.209 Radiated Spurious Emissions Test Distance: 3 Meters Sequence#: 210 Vert UNII Bands. 20MHz Channel width.

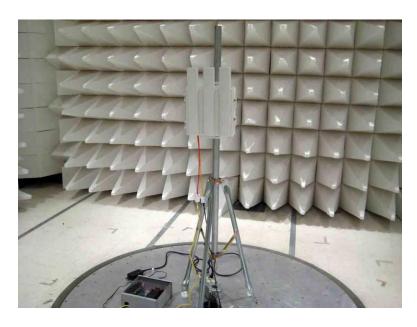




## **Test Setup Photos**

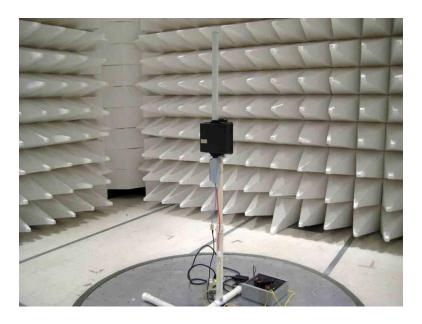


17dBi Sector

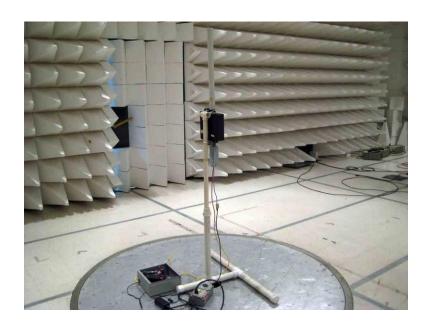


17dBi Sector





18dBi, 11dBi

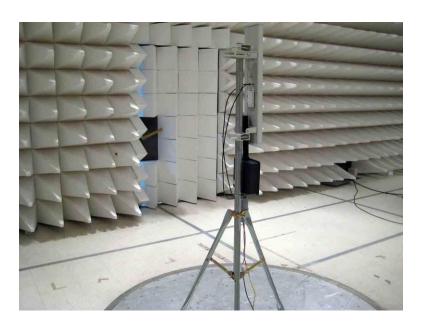


18dBi, 11dBi





20dBi Sector



20dBi Sector



# 15.407(b)(6) Unwanted Emission Limits -Conducted

## **Test Data Sheets**

Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • (510) 249 - 1170

Customer: Digital Path

Specification: 15.207 AC Mains - Average

Work Order #: 92682 Date: 6/3/2012
Test Type: Conducted Emissions Time: 6:49:37 PM
Equipment: 5GHz Panel (18dBi) + Omni (11dBi) Sequence#: 212
Manufacturer: Digital Path Tested By: E. Wong
Model: G5RL10G 110V 60Hz

S/N: EMI 2

Test Equipment:

| ID | Asset #  | Description       | Model        | Calibration Date | Cal Due Date |
|----|----------|-------------------|--------------|------------------|--------------|
|    | AN02668  | Spectrum Analyzer | E4446A       | 2/23/2011        | 2/23/2013    |
| T1 | ANP00081 | Attenuator        | PE7002-10    | 5/13/2011        | 5/13/2013    |
| T2 | ANP05258 | High Pass Filter  | HE9615-150K- | 12/2/2010        | 12/2/2012    |
|    |          |                   | 50-720B      |                  |              |
| Т3 | ANP05440 | Cable             |              | 3/7/2011         | 3/7/2013     |
| T4 | ANP05300 | Cable             | RG214/U      | 3/7/2011         | 3/7/2013     |
| T5 | AN00494  | 50uH LISN-Loss L1 | 3816/NM      | 3/29/2011        | 3/29/2013    |
|    |          | (L) Black (dB)    |              |                  |              |
|    | AN00494  | 50uH LISN-Loss L2 | 3816/NM      | 3/29/2011        | 3/29/2013    |
|    |          | (N) White (dB)    |              |                  |              |

Equipment Under Test (\* = EUT):

| Equipment Chaci Test | - DOI).      |           |       |  |
|----------------------|--------------|-----------|-------|--|
| Function             | Manufacturer | Model #   | S/N   |  |
| 5GHz Panel (18dBi) + | Digital Path | G5RL10G   | EMI 2 |  |
| Omni (11dBi)*        |              |           |       |  |
| Power Supply         | Condor       | STD-2427P | NA    |  |

Support Devices:

| Function            | Manufacturer | Model #       | S/N             |
|---------------------|--------------|---------------|-----------------|
| Laptop Computer     | HP           | ProBook 6565b | 5CB13637ZF      |
| Laptop Power Supply | HP           | 608428-002    | F12941126327228 |

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#### Test Conditions / Notes:

The EUT installed on a pole as intended. DC power port is connected to a DC power supply via a CAT5 cable. The Ethernet port is connected to a remote laptop via unshielded twisted pair.

The Remote laptop is running test software to exercise the intended functionalities.

11dBi Omni antenna is connected to radio 0 (instance 1)

18 dBi panel antenna is connected to radio1 (instance 2)

This data sheet is for the EUT transmitting via 18dBi Panel antenna connected to radio 1 (instance 2).

Representing the worst case configuration for the product series, Receiver circuit and GPS receiver are active.

Freq: 5590MHz BW= 10MHz

802.11a: 24 Mbps, TX power setting= 22

Temperature: 21.9°C, Relative Humidity: 38-43%, Atmospheric Pressure: 101.5kPa

Frequency range of measurement = 150kHz-30MHz.

150 kHz-30 MHz; RBW=9 kHz, VBW=9kHz

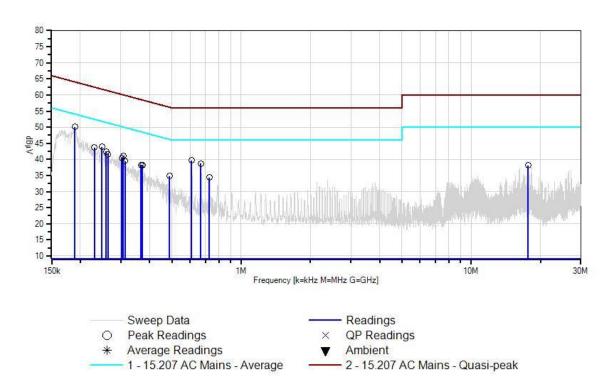
Ext Attn: 0 dB

|    | rement Data:          | Re   | eading lis   | ted by ma | argin. | Test Lead: Black |       |           |              |        |        |  |
|----|-----------------------|------|--------------|-----------|--------|------------------|-------|-----------|--------------|--------|--------|--|
| #  | Freq                  | Rdng | T1           | T2        | T3     | T4               | Dist  | Corr      | Spec         | Margin | Polar  |  |
|    | -                     |      | T5           |           |        |                  |       |           | -            |        |        |  |
|    | MHz                   | dΒμV | dB           | dB        | dB     | dB               | Table | dΒμV      | dΒμV         | dB     | Ant    |  |
| 1  | 189.269k              | 39.9 | +9.8         | +0.3      | +0.0   | +0.0             | +0.0  | 50.1      | 54.1         | -4.0   | Black  |  |
|    |                       |      | +0.1         |           |        |                  |       |           |              |        |        |  |
| 2  | 608.140k              | 29.6 | +9.8         | +0.2      | +0.0   | +0.0             | +0.0  | 39.7      | 46.0         | -6.3   | Black  |  |
|    |                       | 20.5 | +0.1         | 0.0       | 0.0    | 0.0              | 0.0   | 20.5      | 4.5.0        |        | D1 1   |  |
| 3  | 668.498k              | 28.7 | +9.8         | +0.2      | +0.0   | +0.0             | +0.0  | 38.7      | 46.0         | -7.3   | Black  |  |
| 1  | 249 1721              | 24.0 | +0.0         | . 0. 1    | .00    | . 0. 0           | .00   | 42.0      | <i>5</i> 1.0 | 7.0    | D11    |  |
| 4  | 248.173k              | 34.0 | +9.8<br>+0.0 | +0.1      | +0.0   | +0.0             | +0.0  | 43.9      | 51.8         | -7.9   | Black  |  |
| 5  | 229.993k              | 33.8 | +9.8         | +0.1      | +0.0   | +0.0             | +0.0  | 43.7      | 52.4         | -8.7   | Black  |  |
|    | 229.993K              | 33.0 | +0.0         | +0.1      | +0.0   | +0.0             | +0.0  | 43.7      | 32.4         | -0.7   | Diack  |  |
| 6  | 307.076k              | 31.1 | +9.8         | +0.1      | +0.0   | +0.0             | +0.0  | 41.0      | 50.0         | -9.0   | Black  |  |
|    |                       |      | +0.0         |           |        |                  |       |           |              |        |        |  |
| 7  | 259.081k              | 32.5 | +9.8         | +0.1      | +0.0   | +0.0             | +0.0  | 42.4      | 51.5         | -9.1   | Black  |  |
|    |                       |      | +0.0         |           |        |                  |       |           |              |        |        |  |
| 8  | 303.440k              | 30.5 | +9.8         | +0.1      | +0.0   | +0.0             | +0.0  | 40.4      | 50.1         | -9.7   | Black  |  |
|    |                       |      | +0.0         |           |        |                  |       |           |              |        |        |  |
| 9  | 263.444k              | 31.7 | +9.8         | +0.1      | +0.0   | +0.0             | +0.0  | 41.6      | 51.3         | -9.7   | Black  |  |
|    |                       |      | +0.0         |           |        |                  |       |           |              |        |        |  |
| 10 | 372.525k              | 28.4 | +9.7         | +0.1      | +0.0   | +0.0             | +0.0  | 38.3      | 48.4         | -10.1  | Black  |  |
| 11 | 212 9041              | 20.6 | +0.1         | . 0. 1    | .00    | . 0. 0           | .00   | 20.5      | 40.0         | 10.4   | D11    |  |
| 11 | 312.894k              | 29.6 | +9.8<br>+0.0 | +0.1      | +0.0   | +0.0             | +0.0  | 39.5      | 49.9         | -10.4  | Black  |  |
| 12 | 367.435k              | 28.3 | +9.7         | +0.1      | +0.0   | +0.0             | +0.0  | 38.2      | 48.6         | -10.4  | Black  |  |
| 12 | 307. <del>4</del> 33K | 20.5 | +0.1         | 10.1      | 10.0   | 10.0             | 10.0  | 30.2      | 70.0         | -10.4  | Diack  |  |
| 13 | 488.878k              | 24.9 | +9.8         | +0.1      | +0.0   | +0.0             | +0.0  | 34.8      | 46.2         | -11.4  | Black  |  |
| 10 | 100107011             | ,    | +0.0         |           |        | . 0.0            | . 0.0 | <i>cc</i> |              |        | 210011 |  |
| 14 | 728.856k              | 24.4 | +9.8         | +0.2      | +0.0   | +0.0             | +0.0  | 34.4      | 46.0         | -11.6  | Black  |  |
|    |                       |      | +0.0         |           |        |                  |       |           |              |        |        |  |
| 15 | 17.697M               | 28.0 | +9.7         | +0.1      | +0.2   | +0.1             | +0.0  | 38.1      | 50.0         | -11.9  | Black  |  |
|    |                       |      | +0.0         |           |        |                  |       |           |              |        |        |  |

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CKC Laboratories, Inc. Date: 6/3/2012 Time: 6:49:37 PM Digital Path WO#: 92682 15.207 AC Mains - Average Test Lead: Black 110V 60Hz Sequence#: 212 Black UNII Bands. 20MHz Channel width.





Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • (510) 249 - 1170

Customer: **Digital Path** 

Specification: 15.107 AC Mains Class B - Average

EMI 2

Work Order #: 92682 Date: 6/3/2012
Test Type: Conducted Emissions Time: 18:57:41
Equipment: 5GHz Panel (18dBi) + Omni (11dBi) Sequence#: 213
Manufacturer: Digital Path Tested By: E. Wong
Model: G5RL10G 110V 60Hz

Test Equipment:

S/N:

| ID | Asset #  | Description       | Model        | Calibration Date | Cal Due Date |
|----|----------|-------------------|--------------|------------------|--------------|
|    | AN02668  | Spectrum Analyzer | E4446A       | 2/23/2011        | 2/23/2013    |
| T1 | ANP00081 | Attenuator        | PE7002-10    | 5/13/2011        | 5/13/2013    |
| T2 | ANP05258 | High Pass Filter  | HE9615-150K- | 12/2/2010        | 12/2/2012    |
|    |          |                   | 50-720B      |                  |              |
| T3 | ANP05440 | Cable             |              | 3/7/2011         | 3/7/2013     |
| T4 | ANP05300 | Cable             | RG214/U      | 3/7/2011         | 3/7/2013     |
|    | AN00494  | 50uH LISN-Loss L1 | 3816/NM      | 3/29/2011        | 3/29/2013    |
|    |          | (L) Black (dB)    |              |                  |              |
| T5 | AN00494  | 50uH LISN-Loss L2 | 3816/NM      | 3/29/2011        | 3/29/2013    |
|    |          | (N) White (dB)    |              |                  |              |

Equipment Under Test (\* = EUT):

| -4 (                 | / -          |           |       |  |
|----------------------|--------------|-----------|-------|--|
| Function             | Manufacturer | Model #   | S/N   |  |
| 5GHz Panel (18dBi) + | Digital Path | G5RL10G   | EMI 2 |  |
| Omni (11dBi)*        |              |           |       |  |
| Power Supply         | Condor       | STD-2427P | NA    |  |

Support Devices:

| FF                  |              |               |                 |
|---------------------|--------------|---------------|-----------------|
| Function            | Manufacturer | Model #       | S/N             |
| Laptop Computer     | HP           | ProBook 6565b | 5CB13637ZF      |
| Laptop Power Supply | HP           | 608428-002    | F12941126327228 |

#### Test Conditions / Notes:

The EUT installed on a pole as intended. DC power port is connected to a DC power supply via a CAT5 cable. The Ethernet port is connected to a remote laptop via unshielded twisted pair.

The Remote laptop is running test software to exercise the intended functionalities.

11dBi Omni antenna is connected to radio 0 (instance 1)

18 dBi panel antenna is connected to radio1 (instance 2)

This data sheet is for the EUT transmitting via 18dBi Panel antenna connected to radio 1 (instance 2).

Representing the worst case configuration for the product series, Receiver circuit and GPS receiver are active.

Freq: 5590MHz BW= 10MHz

802.11a: 24 Mbps, TX power setting= 22

Temperature: 21.9°C, Relative Humidity: 38-43%, Atmospheric Pressure: 101.5kPa

Frequency range of measurement = 150 kHz - 30 MHz.

150 kHz-30 MHz; RBW=9 kHz, VBW=9kHz

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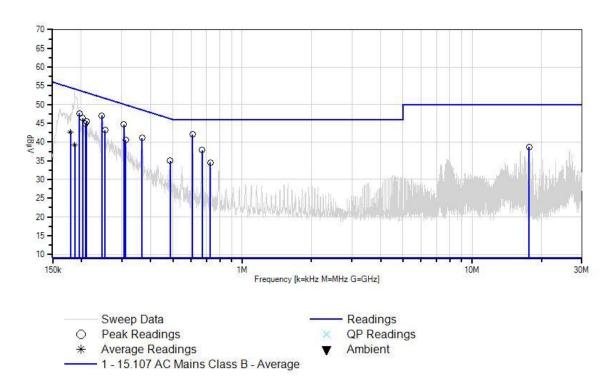
Ext Attn: 0 dB

| Measui | rement Data: | Re   | eading lis   | ted by ma | argin. |        |       | Test Lead | d: White |        |            |
|--------|--------------|------|--------------|-----------|--------|--------|-------|-----------|----------|--------|------------|
| #      | Freq         | Rdng | T1<br>T5     | T2        | Т3     | T4     | Dist  | Corr      | Spec     | Margin | Polar      |
|        | MHz          | dΒμV | dB           | dB        | dB     | dB     | Table | dΒμV      | dΒμV     | dB     | Ant        |
| 1      | 608.140k     | 32.0 | +9.8         | +0.2      | +0.0   | +0.0   | +0.0  | 42.0      | 46.0     | -4.0   | White      |
|        |              |      | +0.0         |           |        |        |       |           |          |        |            |
| 2      | 245.991k     | 37.2 | +9.8         | +0.1      | +0.0   | +0.0   | +0.0  | 47.1      | 51.9     | -4.8   | White      |
|        |              |      | +0.0         |           |        |        |       |           |          |        |            |
| 3      | 306.349k     | 34.7 | +9.8         | +0.1      | +0.0   | +0.0   | +0.0  | 44.7      | 50.1     | -5.4   | White      |
|        |              |      | +0.1         |           |        |        |       |           |          |        |            |
| 4      | 196.541k     | 37.6 | +9.8         | +0.2      | +0.0   | +0.0   | +0.0  | 47.6      | 53.8     | -6.2   | White      |
|        |              |      | +0.0         |           |        |        |       |           |          |        |            |
| 5      | 202.359k     | 36.5 | +9.8         | +0.1      | +0.0   | +0.0   | +0.0  | 46.4      | 53.5     | -7.1   | White      |
|        |              |      | +0.0         |           |        |        |       |           |          |        |            |
| 6      | 366.707k     | 31.2 | +9.7         | +0.1      | +0.0   | +0.0   | +0.0  | 41.1      | 48.6     | -7.5   | White      |
|        |              |      | +0.1         |           |        |        |       |           |          |        |            |
| 7      | 211.085k     | 35.5 | +9.8         | +0.1      | +0.0   | +0.0   | +0.0  | 45.4      | 53.2     | -7.8   | White      |
|        |              |      | +0.0         |           |        |        |       |           |          |        |            |
| 8      | 669.952k     | 27.8 | +9.8         | +0.2      | +0.0   | +0.0   | +0.0  | 37.8      | 46.0     | -8.2   | White      |
|        |              |      | +0.0         |           |        |        |       |           |          |        |            |
| 9      | 208.176k     | 35.0 | +9.8         | +0.1      | +0.0   | +0.0   | +0.0  | 44.9      | 53.3     | -8.4   | White      |
| 10     | 252 2521     | 22.2 | +0.0         | 0.1       | 0.0    | 0.0    | 0.0   | 40.0      |          | 0.4    | ****       |
| 10     | 253.263k     | 33.3 | +9.8         | +0.1      | +0.0   | +0.0   | +0.0  | 43.2      | 51.6     | -8.4   | White      |
| 1.1    | 212 1671     | 20.5 | +0.0         | . 0.1     | .00    | . 0. 0 | .00   | 40.5      | 40.0     | 0.4    | XX71. '4 . |
| 11     | 312.167k     | 30.5 | +9.8         | +0.1      | +0.0   | +0.0   | +0.0  | 40.5      | 49.9     | -9.4   | White      |
| 12     | 496 6061-    | 25.1 | +0.1         | +O 1      | + O O  | .00    | .00   | 25.0      | 16.2     | 11.2   | XX/1-:4-   |
| 12     | 486.696k     | 25.1 | +9.8<br>+0.0 | +0.1      | +0.0   | +0.0   | +0.0  | 35.0      | 46.2     | -11.2  | White      |
| 13     | 17.697M      | 28.6 | +9.7         | +0.1      | +0.2   | +0.1   | +0.0  | 38.7      | 50.0     | -11.3  | White      |
| 13     | 17.09/101    | 26.0 | +9.7         | +0.1      | +0.2   | +0.1   | +0.0  | 36.7      | 30.0     | -11.3  | willte     |
| 14     | 728.856k     | 24.5 | +9.8         | +0.2      | +0.0   | +0.0   | +0.0  | 34.5      | 46.0     | -11.5  | White      |
| 14     | 720.030K     | 24.3 | +0.0         | +0.2      | +0.0   | +0.0   | +0.0  | 34.3      | 40.0     | -11.3  | Wille      |
| 15     | 179.505k     | 32.4 | +9.8         | +0.4      | +0.0   | +0.0   | +0.0  | 42.6      | 54.5     | -11.9  | White      |
|        | Ave          | 34.7 | +0.0         | 10.7      | 10.0   | 10.0   | 10.0  | 72.0      | 57.5     | 11.7   | ** 11110   |
| 16     | 187.088k     | 29.2 | +9.8         | +0.2      | +0.0   | +0.0   | +0.0  | 39.2      | 54.2     | -15.0  | White      |
| _      | Ave          |      | +0.0         | . 0.2     | . 0.0  | . 0.0  | . 3.0 | 27.2      | 22       | 20.0   |            |
| ٨      | 187.088k     | 43.4 | +9.8         | +0.2      | +0.0   | +0.0   | +0.0  | 53.4      | 54.2     | -0.8   | White      |
|        |              |      | +0.0         |           |        |        |       |           |          |        |            |

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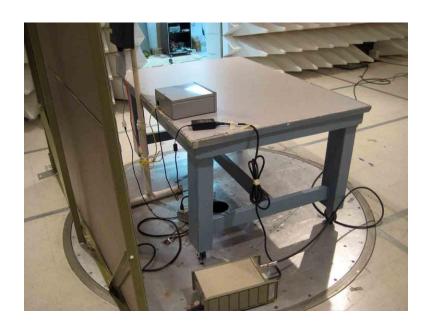
CKC Laboratories, Inc. Date: 6/3/2012 Time: 18:57:41 Digital Path WO#: 92682 15.107 AC Mains Class B - Average Test Lead: White 110V 60Hz Sequence#: 213 White UNII Bands. 20MHz Channel width.





# Test Setup Photos







# 15.407(b)(6) Unwanted Emission Limits -Radiated

## **Test Data Sheets**

Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • (510) 249 - 1170

Customer: **Digital Path** 

Specification: 15.407(b) / 15.209 Radiated Spurious Emissions

Work Order #: 92682 Date: 6/2/2012
Test Type: Radiated Scan Time: 09:51:29
Equipment: 5GHz Panel (18dBi) + Omni (11dBi), Sequence#: 211
Manufacturer: Digital Path Tested By: E. Wong

Model: G5RL10G, S/N: EMI 2

Test Equipment:

| ID  |  |
|---|--|
| T2         AN02157         Horn Antenna-ANSI 3115         1/17/2011         1/17/2013           C63.5         Cable         32026-29094K- 3/21/2012         3/21/2014           T3         AN03302         Cable         32026-29094K- 3/21/2012         3/21/2014           T4         ANP01210         Cable         FSJ1P-50A-4A         3/15/2011         3/15/2013           T5         ANP05913         Cable         32022-29094K- 8/30/2011         8/30/2013           65TC         65TC         5/13/2011         5/13/2013           T6         AN03114         Preamp         AMF-7D- 5/13/2011         5/13/2013           00101800-30-10P         5/13/2011         5/13/2013 |  |
| C63.5       T3     AN03302     Cable     32026-29094K- 3/21/2012 29094K- 3/21/2012 3/21/2014 29094K-72TC     3/21/2014 29094K-72TC       T4     ANP01210     Cable     FSJ1P-50A-4A 3/15/2011 3/15/2013 3/15/2013 3/2022-29094K- 8/30/2011 8/30/2013 65TC       T6     AN03114     Preamp     AMF-7D- 5/13/2011 5/13/2013 00101800-30-10P   |  |
| 29094K-72TC  T4 ANP01210 Cable FSJ1P-50A-4A 3/15/2011 3/15/2013  T5 ANP05913 Cable 32022-29094K- 8/30/2011 8/30/2013 65TC  T6 AN03114 Preamp AMF-7D- 5/13/2011 5/13/2013 00101800-30-10P  |  |
| T5 ANP05913 Cable 32022-29094K- 8/30/2011 8/30/2013 65TC  T6 AN03114 Preamp AMF-7D- 5/13/2011 5/13/2013 00101800-30-10P   |  |
| 65TC T6 AN03114 Preamp AMF-7D- 5/13/2011 5/13/2013 00101800-30-10P  |  |
| 00101800-30-10P   |  |
| AND07027 A  |  |
| ANP05935 Attenuator 84A-10 10/19/2011 10/19/2013  |  |
| ANP01211 Attenuator 23-10-34 4/15/2011 4/15/2013  |  |
| AN01417 High Pass Filter 84300-80039 2/9/2012 2/9/2014  |  |
| AN02694 Active Horn AMFW-5F- 11/10/2010 11/10/2012<br>Antenna-ANSI 18002650-20-10P<br>C63.5 Antenna<br>Factors (dB)   |  |
| AN02695 Active Horn AMFW-5F- 11/10/2010 11/10/2012 Antenna-ANSI 260400-33-8P C63.5 Antenna Factors (dB)   |  |
| ANP05911 Cable 32022-29094K- 8/30/2011 8/30/2013 65TC   |  |
| T7 AN00852 Biconilog Antenna CBL 6111C 11/16/2010 11/16/2012  |  |
| T8 AN00730 Preamp 1/31/2011 1/31/2013   |  |
| T9 ANP05299 Cable RG214 3/6/2011 3/6/2013   |  |
| T10 ANP05300 Cable RG214/U 3/7/2011 3/7/2013  |  |
| T11 ANP05440 Cable 3/7/2011 3/7/2013  |  |
| AN00432 Loop Antenna 6502 3/31/2011 3/31/2013   |  |

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#### Equipment Under Test (\* = EUT):

| Function             | Manufacturer | Model # | S/N   |
|----------------------|--------------|---------|-------|
| 5GHz Panel (18dBi) + | Digital Path | G5RL10G | EMI 2 |
| Omni (11dBi)*        |              |         |       |

#### Support Devices:

| Function            | Manufacturer | Model #       | S/N             |
|---------------------|--------------|---------------|-----------------|
| Laptop Computer     | HP           | ProBook 6565b | 5CB13637ZF      |
| Laptop Power Supply | HP           | 608428-002    | F12941126327228 |

#### Test Conditions / Notes:

The EUT installed on a pole as intended. DC power port is connected to a DC power supply via a CAT5 cable. The Ethernet port is connected to a remote laptop via unshielded twisted pair.

The Remote laptop is running test software to exercise the intended functionalities. . Representing the worst case configuration for the product series, Receiver circuit and GPS receiver are active.

11dBi Omni antenna is connected to radio 0 (instance 1)

18 dBi panel antenna is connected to radio1 (instance 2)

This data sheet is for the EUT transmitting via 18dBi Panel antenna connected to radio 1 (instance 2). Recoded data is from the non-intentional radiation of the product.

Freq: 5590MHz BW= 10MHz

802.11a: 24 Mbps, TX power setting= 22

Temperature: 21.9°C, Relative Humidity: 38-43%, Atmospheric Pressure: 101.5kPa

Frequency range of measurement = 9kHz-40GHz.

9 kH -150 kHz; RBW=200 Hz, VBW=200 Hz;150 kHz-30 MHz; RBW=9 kHz, VBW=9 kHz;30 MHz-1000 MHz; RBW=120 kHz, VBW=120 kHz,1000 MHz-40,000 MHz; RBW=1 MHz, VBW=1 MHz.

Recorded emission level is below the EIRP limit of -27dBm/MHz (68.2dBuV/m @ 3 meter) IAW 789033 D01 General UNII Test Procedures V01r01

#### Ext Attn: 0 dB

| Measi | ırement Data: | Re   | Reading listed by margin. Test Distance: 3 Meters |      |       |       |       |             |                |        |       |
|-------|---------------|------|---|------|-------|-------|-------|-------------|----------------|--------|-------|
| #     | Freq          | Rdng | T1  | T2   | T3    | T4    | Dist  | Corr        | Spec           | Margin | Polar |
|       |               |      | T5  | T6   | T7    | T8    |       |             |                |        |       |
|       |               |      | T9  | T10  | T11   |       |       |             |                |        |       |
|       | MHz           | dΒμV | dB  | dB   | dB    | dB    | Table | $dB\mu V/m$ | $dB\mu V/m \\$ | dB     | Ant   |
| 1     | 32.597M       | 48.7 | +0.0  | +0.0 | +0.0  | +0.0  | +0.0  | 39.6        | 40.0           | -0.4   | Vert  |
|       | QP            |      | +0.0  | +0.0 | +18.1 | -27.6 |       |             |                |        |       |
|       |               |      | +0.0  | +0.1 | +0.3  |       |       |             |                |        |       |
| ^     | 32.597M       | 49.6 | +0.0  | +0.0 | +0.0  | +0.0  | +0.0  | 40.5        | 40.0           | +0.5   | Vert  |
|       |               |      | +0.0  | +0.0 | +18.1 | -27.6 |       |             |                |        |       |
|       |               |      | +0.0  | +0.1 | +0.3  |       |       |             |                |        |       |
| 3     | 51.817M       | 57.8 | +0.0  | +0.0 | +0.0  | +0.0  | +0.0  | 39.2        | 40.0           | -0.8   | Vert  |
|       | QP            |      | +0.0  | +0.0 | +8.3  | -27.5 |       |             |                |        |       |
|       |               |      | +0.0  | +0.2 | +0.4  |       |       |             |                |        |       |
| ^     | 51.817M       | 60.0 | +0.0  | +0.0 | +0.0  | +0.0  | +0.0  | 41.4        | 40.0           | +1.4   | Vert  |
|       |               |      | +0.0  | +0.0 | +8.3  | -27.5 |       |             |                |        |       |
|       |               |      | +0.0  | +0.2 | +0.4  |       |       |             |                |        |       |

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| 5 765.509M  | 48.3 | +0.0 | +0.0 | +0.0  | +0.0  | +0.0 | 45.0 | 46.0 | -1.0 | Vert  |
|-------------|------|------|------|-------|-------|------|------|------|------|-------|
| QP          |      | +0.0 | +0.0 | +21.2 | -27.3 |      |      |      |      |       |
|             |      | +0.2 | +0.9 | +1.7  |       |      |      |      |      |       |
| ^ 765.509M  | 50.9 | +0.0 | +0.0 | +0.0  | +0.0  | +0.0 | 47.6 | 46.0 | +1.6 | Vert  |
|             |      | +0.0 | +0.0 | +21.2 | -27.3 |      |      |      |      |       |
|             |      | +0.2 | +0.9 | +1.7  |       |      |      |      |      |       |
| 7 30.627M   | 48.3 | +0.0 | +0.0 | +0.0  | +0.0  | +0.0 | 39.0 | 40.0 | -1.0 | Vert  |
| QP          |      | +0.0 | +0.0 | +17.9 | -27.6 |      |      |      |      |       |
|             |      | +0.0 | +0.1 | +0.3  |       |      |      |      |      |       |
| ^ 30.627M   | 51.1 | +0.0 | +0.0 | +0.0  | +0.0  | +0.0 | 41.8 | 40.0 | +1.8 | Vert  |
|             |      | +0.0 | +0.0 | +17.9 | -27.6 |      |      |      |      |       |
|             |      | +0.0 | +0.1 | +0.3  |       |      |      |      |      |       |
| 9 765.572M  | 48.3 | +0.0 | +0.0 | +0.0  | +0.0  | +0.0 | 45.0 | 46.0 | -1.0 | Horiz |
| QP          |      | +0.0 | +0.0 | +21.2 | -27.3 |      |      |      |      |       |
|             |      | +0.2 | +0.9 | +1.7  |       |      |      |      |      |       |
| ^ 765.572M  | 50.6 | +0.0 | +0.0 | +0.0  | +0.0  | +0.0 | 47.3 | 46.0 | +1.3 | Horiz |
|             |      | +0.0 | +0.0 | +21.2 | -27.3 |      |      |      |      |       |
|             |      | +0.2 | +0.9 | +1.7  |       |      |      |      |      |       |
| 11 191.995M | 59.3 | +0.0 | +0.0 | +0.0  | +0.0  | +0.0 | 42.1 | 43.5 | -1.4 | Vert  |
| QP          |      | +0.0 | +0.0 | +9.0  | -27.5 |      |      |      |      |       |
|             |      | +0.1 | +0.4 | +0.8  |       |      |      |      |      |       |
| ^ 191.995M  | 60.0 | +0.0 | +0.0 | +0.0  | +0.0  | +0.0 | 42.8 | 43.5 | -0.7 | Vert  |
|             |      | +0.0 | +0.0 | +9.0  | -27.5 |      |      |      |      |       |
|             |      | +0.1 | +0.4 | +0.8  |       |      |      |      |      |       |
| 13 761.572M | 47.8 | +0.0 | +0.0 | +0.0  | +0.0  | +0.0 | 44.4 | 46.0 | -1.6 | Horiz |
| QP          |      | +0.0 | +0.0 | +21.1 | -27.3 |      |      |      |      |       |
|             |      | +0.2 | +0.9 | +1.7  |       |      |      |      |      |       |
| ^ 761.572M  | 49.8 | +0.0 | +0.0 | +0.0  | +0.0  | +0.0 | 46.4 | 46.0 | +0.4 | Horiz |
|             |      | +0.0 | +0.0 | +21.1 | -27.3 |      |      |      |      |       |
|             |      | +0.2 | +0.9 | +1.7  |       |      |      |      |      |       |
| 15 816.009M | 45.3 | +0.0 | +0.0 | +0.0  | +0.0  | +0.0 | 42.9 | 46.0 | -3.1 | Vert  |
| QP          |      | +0.0 | +0.0 | +21.9 | -27.2 |      |      |      |      |       |
|             |      | +0.2 | +0.9 | +1.8  |       |      |      |      |      |       |
| ^ 816.009M  | 46.8 | +0.0 | +0.0 | +0.0  | +0.0  | +0.0 | 44.4 | 46.0 | -1.6 | Vert  |
|             |      | +0.0 | +0.0 | +21.9 | -27.2 |      |      |      |      |       |
|             |      | +0.2 | +0.9 | +1.8  |       |      |      |      |      |       |
| 17 43.795M  | 51.5 | +0.0 | +0.0 | +0.0  | +0.0  | +0.0 | 36.2 | 40.0 | -3.8 | Vert  |
| QP          |      | +0.0 |      | +11.8 | -27.6 |      |      |      |      |       |
|             |      | +0.0 | +0.2 | +0.3  |       |      |      |      |      |       |
| ^ 43.795M   | 54.2 | +0.0 | +0.0 | +0.0  | +0.0  | +0.0 | 38.9 | 40.0 | -1.1 | Vert  |
|             |      | +0.0 | +0.0 | +11.8 | -27.6 |      |      |      |      |       |
|             |      | +0.0 | +0.2 | +0.3  |       |      |      |      |      |       |
| 19 720.009M | 46.3 | +0.0 | +0.0 | +0.0  | +0.0  | +0.0 | 42.0 | 46.0 | -4.0 | Vert  |
| QP          |      | +0.0 | +0.0 | +20.2 | -27.2 |      |      |      |      |       |
|             |      | +0.2 | +0.8 | +1.7  |       |      |      |      |      |       |
| ^ 720.009M  | 46.5 | +0.0 | +0.0 | +0.0  | +0.0  | +0.0 | 42.2 | 46.0 | -3.8 | Vert  |
|             | -    | +0.0 | +0.0 | +20.2 | -27.2 |      |      |      |      |       |
|             |      | +0.2 | +0.8 | +1.7  |       |      |      |      |      |       |
| 21 695.350M | 46.8 | +0.0 | +0.0 | +0.0  | +0.0  | +0.0 | 42.0 | 46.0 | -4.0 | Horiz |
|             |      | +0.0 | +0.0 | +19.8 | -27.2 |      |      |      |      |       |
|             |      | +0.2 | +0.8 | +1.6  |       |      |      |      |      |       |
|             |      |      |      |       |       |      |      |      |      |       |

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| 22 863.999M  | 44.2 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 41.7 | 46.0 | -4.3 | Vert  |
|--------------|------|------|-------|-------|-------|------|------|------|------|-------|
|              |      | +0.0 | +0.0  | +21.8 | -27.3 |      |      |      |      |       |
|              |      | +0.2 | +1.0  | +1.8  |       |      |      |      |      |       |
| 23 898.460M  | 44.1 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 41.6 | 46.0 | -4.4 | Vert  |
|              |      | +0.0 | +0.0  | +21.8 | -27.4 |      |      |      |      |       |
|              |      | +0.2 | +1.0  | +1.9  |       |      |      |      |      |       |
| 24 912.000M  | 43.8 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 41.2 | 46.0 | -4.8 | Vert  |
|              |      | +0.0 | +0.0  | +21.8 | -27.5 |      |      |      |      |       |
|              |      | +0.2 | +1.0  | +1.9  |       |      |      |      |      |       |
| 25 65.757M   | 55.6 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 34.8 | 40.0 | -5.2 | Vert  |
| QP           |      | +0.0 | +0.0  | +6.1  | -27.5 |      |      |      |      |       |
|              |      | +0.0 | +0.2  | +0.4  |       |      |      |      |      |       |
| ^ 65.757M    | 57.5 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 36.7 | 40.0 | -3.3 | Vert  |
|              |      | +0.0 | +0.0  | +6.1  | -27.5 |      |      |      |      |       |
|              |      | +0.0 | +0.2  | +0.4  |       |      |      |      |      |       |
| 27 39.480M   | 47.3 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 34.5 | 40.0 | -5.5 | Vert  |
|              |      | +0.0 | +0.0  | +14.3 | -27.6 |      |      |      |      |       |
|              |      | +0.0 | +0.2  | +0.3  |       |      |      |      |      |       |
| 28 960.000M  | 42.3 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 39.9 | 46.0 | -6.1 | Vert  |
|              |      | +0.0 | +0.0  | +22.1 | -27.8 |      |      |      |      |       |
|              |      | +0.3 | +1.0  | +2.0  |       |      |      |      |      |       |
| 29 165.607M  | 52.9 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 36.6 | 43.5 | -6.9 | Vert  |
| QP           |      | +0.0 | +0.0  | +10.1 | -27.5 |      |      |      |      |       |
|              |      | +0.1 | +0.3  | +0.7  |       |      |      |      |      |       |
| ^ 165.607M   | 54.6 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 38.3 | 43.5 | -5.2 | Vert  |
|              |      | +0.0 | +0.0  | +10.1 | -27.5 |      |      |      |      |       |
|              |      | +0.1 | +0.3  | +0.7  |       |      |      |      |      |       |
| 31 287.995M  | 51.9 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 38.9 | 46.0 | -7.1 | Vert  |
|              |      | +0.0 | +0.0  | +12.9 | -27.5 |      |      |      |      |       |
|              |      | +0.1 | +0.5  | +1.0  |       |      |      |      |      |       |
| 32 875.010M  | 40.9 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 38.5 | 46.0 | -7.5 | Vert  |
|              |      | +0.0 | +0.0  | +21.8 | -27.3 |      |      |      |      |       |
|              |      | +0.2 | +1.0  | +1.9  |       |      |      |      |      |       |
| 33 794.590M  | 41.0 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 38.4 | 46.0 | -7.6 | Vert  |
|              |      | +0.0 | +0.0  | +21.8 | -27.2 |      |      |      |      |       |
|              |      | +0.2 | +0.9  | +1.7  |       |      |      |      |      |       |
| 34 4267.000M | 66.2 | +0.0 | +32.7 | +1.4  | +3.9  | +0.0 | 45.9 | 54.0 | -8.1 | Vert  |
|              |      | +1.4 | -59.7 | +0.0  | +0.0  |      |      |      |      |       |
|              |      | +0.0 | +0.0  | +0.0  |       |      |      |      |      |       |
| 35 1030.500M | 78.3 | +0.0 | +23.5 | +0.7  | +1.8  | +0.0 | 45.3 | 54.0 | -8.7 | Horiz |
|              |      | +0.7 | -59.7 | +0.0  | +0.0  |      |      |      |      |       |
|              |      | +0.0 | +0.0  | +0.0  |       |      |      |      |      |       |
| 36 765.450M  | 40.4 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 37.1 | 46.0 | -8.9 | Horiz |
|              |      | +0.0 | +0.0  | +21.2 | -27.3 |      |      |      |      |       |
|              |      | +0.2 | +0.9  | +1.7  |       |      |      |      |      |       |
| 37 231.780M  | 51.9 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 37.1 | 46.0 | -8.9 | Vert  |
|              |      | +0.0 | +0.0  | +11.3 | -27.5 |      |      |      |      |       |
|              |      | +0.1 | +0.4  | +0.9  |       |      |      |      |      |       |
| 38 88.850M   | 52.6 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 34.6 | 43.5 | -8.9 | Vert  |
|              |      | +0.0 | +0.0  | +8.7  | -27.4 |      |      |      |      |       |
|              |      | +0.0 | +0.2  | +0.5  |       |      |      |      |      |       |
|              |      |      |       |       |       |      |      |      |      |       |

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| 39   | 528.000M           | 43.8    | +0.0      | +0.0           | +0.0            | +0.0          | +0.0   | 37.0 | 46.0            | -9.0  | Horiz  |
|------|--------------------|---------|-----------|----------------|-----------------|---------------|--------|------|-----------------|-------|--------|
|      |                    |         | +0.0      | +0.0           | +18.2           | -27.3         |        |      |                 |       |        |
|      |                    |         | +0.2      | +0.7           | +1.4            |               |        |      |                 |       |        |
| 40   | 4324.000M          | 64.9    | +0.0      | +32.5          | +1.4            | +3.9          | +0.0   | 44.5 | 54.0            | -9.5  | Horiz  |
|      |                    |         | +1.4      | -59.6          | +0.0            | +0.0          |        |      |                 |       |        |
|      |                    |         | +0.0      | +0.0           | +0.0            |               |        |      |                 |       |        |
| 41   | 695.430M           | 40.7    | +0.0      | +0.0           | +0.0            | +0.0          | +0.0   | 35.9 | 46.0            | -10.1 | Vert   |
|      |                    |         | +0.0      | +0.0           | +19.8           | -27.2         |        |      |                 |       |        |
| - 10 | 400 4003 5         | 12.2    | +0.2      | +0.8           | +1.6            | 0.0           | 0.0    | 27.0 | 1.5.0           | 10.2  | **     |
| 42   | 499.180M           | 43.2    | +0.0      | +0.0           | +0.0            | +0.0          | +0.0   | 35.8 | 46.0            | -10.2 | Vert   |
|      |                    |         | +0.0      | +0.0           | +17.8           | -27.3         |        |      |                 |       |        |
|      |                    | 10.1    | +0.2      | +0.6           | +1.3            |               |        |      |                 | 10.5  |        |
| 43   | 299.520M           | 48.4    | +0.0      | +0.0           | +0.0            | +0.0          | +0.0   | 35.7 | 46.0            | -10.3 | Vert   |
|      |                    |         | +0.0      | +0.0           | +13.1           | -27.4         |        |      |                 |       |        |
|      | 7.50.0003.5        | 44.0    | +0.1      | +0.5           | +1.0            | 0.0           |        | 27.7 | 4.6.0           | 10.7  | **     |
| 44   | 563.030M           | 41.8    | +0.0      | +0.0           | +0.0            | +0.0          | +0.0   | 35.5 | 46.0            | -10.5 | Vert   |
|      |                    |         | +0.0      | +0.0           | +18.7           | -27.3         |        |      |                 |       |        |
| 4.5  | 1207.00016         | 75.0    | +0.2      | +0.7           | +1.4            | 2.1           | 0.0    | 10.0 | <b>740</b>      | 10.7  | ** '   |
| 45   | 1397.000M          | 75.3    | +0.0      | +24.0          | +0.8            | +2.1          | +0.0   | 43.3 | 54.0            | -10.7 | Horiz  |
|      |                    |         | +0.8      | -59.7          | +0.0            | +0.0          |        |      |                 |       |        |
| 1.0  | 226 02014          | 16.6    | +0.0      | +0.0           | +0.0            | .0.0          | . 0. 0 | 24.0 | 16.0            | 11.0  | X7 .   |
| 46   | 336.020M           | 46.6    | +0.0      | +0.0           | +0.0            | +0.0          | +0.0   | 34.8 | 46.0            | -11.2 | Vert   |
|      |                    |         | +0.0      | +0.0           | +14.0           | -27.5         |        |      |                 |       |        |
| 47   | (20.220)/          | 40.1    | +0.1      | +0.5           | +1.1            | .00           | . 0. 0 | 247  | 16.0            | 11.2  | XIt    |
| 47   | 629.230M           | 40.1    | +0.0      | +0.0           | +0.0            | +0.0          | +0.0   | 34.7 | 46.0            | -11.3 | Vert   |
|      |                    |         | +0.0      | +0.0           | +19.3           | -27.1         |        |      |                 |       |        |
| 40   | 220.00014          | 10.6    | +0.2      | +0.7           | +1.5            | .00           | . 0. 0 | 24.2 | 46.0            | 11.7  | V      |
| 48   | 239.980M           | 48.6    | +0.0 +0.0 | $+0.0 \\ +0.0$ | $+0.0 \\ +11.8$ | +0.0<br>-27.5 | +0.0   | 34.3 | 46.0            | -11.7 | Vert   |
|      |                    |         | +0.0      | +0.0           | +11.8           | -27.3         |        |      |                 |       |        |
| 49   | 192.000M           | 48.1    | +0.1      | +0.4           | +0.9            | +0.0          | +0.0   | 30.9 | 43.5            | -12.6 | Horiz  |
| 49   | 192.000WI          | 46.1    | +0.0      | +0.0           | +0.0<br>+9.0    | -27.5         | +0.0   | 30.9 | 43.3            | -12.0 | попи   |
|      |                    |         | +0.0      | +0.4           | +0.8            | -21.3         |        |      |                 |       |        |
| 50   | 106.730M           | 46.7    | +0.1      | +0.4           | +0.0            | +0.0          | +0.0   | 30.7 | 43.5            | -12.8 | Vert   |
| 30   | 100.730WI          | 40.7    | +0.0      | +0.0           | +10.5           | -27.5         | +0.0   | 30.7 | 43.3            | -12.0 | V CI t |
|      |                    |         | +0.1      | +0.3           | +0.6            | -21.3         |        |      |                 |       |        |
| 51   | 1396.000M          | 72.9    | +0.1      | +24.0          | +0.8            | +2.1          | +0.0   | 40.9 | 54.0            | -13.1 | Vert   |
|      | 1370.00011         | 12.7    | +0.8      | -59.7          |                 | +0.0          | 10.0   | 70.7 | J- <b>T.</b> .U | 13.1  | V 011  |
|      |                    |         | +0.0      | +0.0           | +0.0            | . 0.0         |        |      |                 |       |        |
| 52   | 96.000M            | 47.6    | +0.0      | +0.0           | +0.0            | +0.0          | +0.0   | 30.2 | 43.5            | -13.3 | Vert   |
|      | ) 0.0001 <b>11</b> | . / . 0 | +0.0      | +0.0           | +9.5            | -27.6         | . 0.0  | 50.2 | .5.5            | 13.3  | , 510  |
|      |                    |         | +0.0      | +0.2           | +0.5            | _/.0          |        |      |                 |       |        |
| 53   | 399.200M           | 41.9    | +0.0      | +0.0           | +0.0            | +0.0          | +0.0   | 31.9 | 46.0            | -14.1 | Horiz  |
|      | 277.2001.1         | .1.,    | +0.0      | +0.0           | +15.5           | -27.4         | . 0.0  | 22.7 | . 5.0           |       | 110112 |
|      |                    |         | +0.1      | +0.6           | +1.2            | ,             |        |      |                 |       |        |
| 54   | 624.000M           | 35.9    | +0.0      | +0.0           | +0.0            | +0.0          | +0.0   | 30.5 | 46.0            | -15.5 | Horiz  |
|      | 2= 1.3001.2        |         | +0.0      | +0.0           | +19.3           | -27.1         |        |      |                 | -0.0  |        |
|      |                    |         | +0.2      | +0.7           | +1.5            |               |        |      |                 |       |        |
| 55   | 32.610M            | 33.3    | +0.0      | +0.0           | +0.0            | +0.0          | +0.0   | 24.2 | 40.0            | -15.8 | Horiz  |
|      |                    |         | +0.0      | +0.0           | +18.1           | -27.6         |        |      |                 |       |        |
|      |                    |         | +0.0      | +0.1           | +0.3            | . • •         |        |      |                 |       |        |
|      |                    |         |           |                |                 |               |        |      |                 |       |        |

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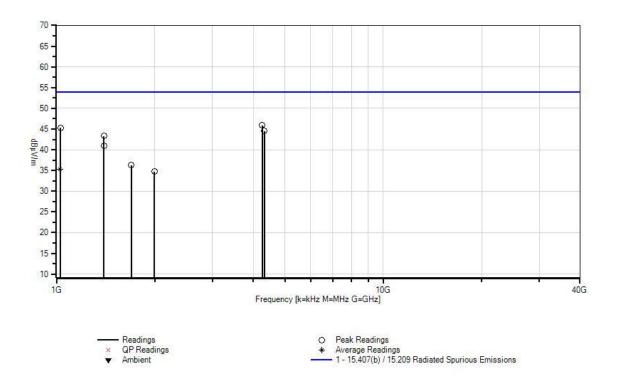


| 56 | 1696.000M | 66.6 | +0.0 | +25.1 | +0.9  | +2.3  | +0.0 | 36.3 | 54.0 | -17.7 | Vert  |
|----|-----------|------|------|-------|-------|-------|------|------|------|-------|-------|
|    |           |      | +0.9 | -59.5 | +0.0  | +0.0  |      |      |      |       |       |
|    |           |      | +0.0 | +0.0  | +0.0  |       |      |      |      |       |       |
| 57 | 232.900M  | 43.0 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 28.2 | 46.0 | -17.8 | Horiz |
|    |           |      | +0.0 | +0.0  | +11.3 | -27.5 |      |      |      |       |       |
|    |           |      | +0.1 | +0.4  | +0.9  |       |      |      |      |       |       |
| 58 | 144.010M  | 40.3 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 25.4 | 43.5 | -18.1 | Vert  |
|    |           |      | +0.0 | +0.0  | +11.4 | -27.4 |      |      |      |       |       |
|    |           |      | +0.1 | +0.3  | +0.7  |       |      |      |      |       |       |
| 59 | 1026.600M | 68.4 | +0.0 | +23.4 | +0.7  | +1.8  | +0.0 | 35.3 | 54.0 | -18.7 | Vert  |
|    | Ave       |      | +0.7 | -59.7 | +0.0  | +0.0  |      |      |      |       |       |
|    |           |      | +0.0 | +0.0  | +0.0  |       |      |      |      |       |       |
| ^  | 1026.600M | 83.9 | +0.0 | +23.4 | +0.7  | +1.8  | +0.0 | 50.8 | 54.0 | -3.2  | Vert  |
|    |           |      | +0.7 | -59.7 | +0.0  | +0.0  |      |      |      |       |       |
|    |           |      | +0.0 | +0.0  | +0.0  |       |      |      |      |       |       |
| 61 | 1993.000M | 63.3 | +0.0 | +26.5 | +1.0  | +2.5  | +0.0 | 34.7 | 54.0 | -19.3 | Vert  |
|    |           |      | +0.9 | -59.5 | +0.0  | +0.0  |      |      |      |       |       |
|    |           |      | +0.0 | +0.0  | +0.0  |       |      |      |      |       |       |
| 62 | 121.030M  | 38.0 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 23.1 | 43.5 | -20.4 | Vert  |
|    |           |      | +0.0 | +0.0  | +11.5 | -27.4 |      |      |      |       |       |
|    |           |      | +0.1 | +0.3  | +0.6  |       |      |      |      |       |       |
| 63 | 66.200M   | 39.6 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 18.8 | 40.0 | -21.2 | Horiz |
|    |           |      | +0.0 | +0.0  | +6.1  | -27.5 |      |      |      |       |       |
|    |           |      | +0.0 | +0.2  | +0.4  |       |      |      |      |       |       |
| 64 | 43.490M   | 33.7 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 18.6 | 40.0 | -21.4 | Horiz |
|    |           |      | +0.0 | +0.0  | +12.0 | -27.6 |      |      |      |       |       |
|    |           |      | +0.0 | +0.2  | +0.3  |       |      |      |      |       |       |
| 65 | 240.020M  | 35.9 | +0.0 | +0.0  | +0.0  | +0.0  | +0.0 | 21.6 | 46.0 | -24.4 | Horiz |
|    |           |      | +0.0 | +0.0  | +11.8 | -27.5 |      |      |      |       |       |
|    |           |      | +0.1 | +0.4  | +0.9  |       |      |      |      |       |       |
|    |           |      |      |       |       |       |      |      |      |       |       |

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CKC Laboratories, Inc. Date: 6/2/2012 Time: 09:51:29 Digital Path WO#: 92682 15.407(b) / 15.209 Radiated Spurious Emissions Test Distance: 3 Meters Sequence#: 211 Horiz UNII Bands. 20MHz Channel width.





Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • (510) 249 - 1170

Customer: **Digital Path** 

Specification: 15.407(b) / 15.209 Radiated Spurious Emissions

Work Order #:92682Date:5/27/2012Test Type:Radiated ScanTime:08:11:46Equipment:5GHz Tri-Sector (17dBi)Sequence#:200Manufacturer:Digital PathTested By:E. Wong

Model: G5RL10T S/N: EMI 1

#### Test Equipment:

| 1 est Equi | pintenti |                   |                 |                  |              |
|------------|----------|-------------------|-----------------|------------------|--------------|
| ID         | Asset #  | Description       | Model           | Calibration Date | Cal Due Date |
| T1         | AN02668  | Spectrum Analyzer | E4446A          | 2/23/2011        | 2/23/2013    |
| T2         | AN02157  | Horn Antenna-ANSI | 3115            | 1/17/2011        | 1/17/2013    |
|            |          | C63.5             |                 |                  |              |
| T3         | AN03302  | Cable             | 32026-29094K-   | 3/21/2012        | 3/21/2014    |
|            |          |                   | 29094K-72TC     |                  |              |
| T4         | ANP01210 | Cable             | FSJ1P-50A-4A    | 3/15/2011        | 3/15/2013    |
| T5         | ANP05913 | Cable             | 32022-29094K-   | 8/30/2011        | 8/30/2013    |
|            |          |                   | 65TC            |                  |              |
| Т6         | AN03114  | Preamp            | AMF-7D-         | 5/13/2011        | 5/13/2013    |
|            |          |                   | 00101800-30-10P |                  |              |
|            | ANP05935 | Attenuator        | 84A-10          | 10/19/2011       | 10/19/2013   |
|            | ANP01211 | Attenuator        | 23-10-34        | 4/15/2011        | 4/15/2013    |
| T7         | AN01417  | High Pass Filter  | 84300-80039     | 2/9/2012         | 2/9/2014     |
|            | AN02694  | Active Horn       | AMFW-5F-        | 11/10/2010       | 11/10/2012   |
|            |          | Antenna-ANSI      | 18002650-20-10P |                  |              |
|            |          | C63.5 Antenna     |                 |                  |              |
|            |          | Factors (dB)      |                 |                  |              |
|            | AN02695  | Active Horn       | AMFW-5F-        | 11/10/2010       | 11/10/2012   |
|            |          | Antenna-ANSI      | 260400-33-8P    |                  |              |
|            |          | C63.5 Antenna     |                 |                  |              |
|            |          | Factors (dB)      |                 |                  |              |
|            | ANP05911 | Cable             | 32022-29094K-   | 8/30/2011        | 8/30/2013    |
|            |          |                   | 65TC            |                  |              |
|            | AN00730  | Preamp            |                 | 1/31/2011        | 1/31/2013    |
|            | AN00432  | Loop Antenna      | 6502            | 3/31/2011        | 3/31/2013    |
|            | AN00852  | Biconilog Antenna | CBL 6111C       | 11/16/2010       | 11/16/2012   |
|            | ANP05299 | Cable             | RG214           | 3/6/2011         | 3/6/2013     |
|            | ANP05300 | Cable             | RG214/U         | 3/7/2011         | 3/7/2013     |
|            | ANP05440 | Cable             |                 | 3/7/2011         | 3/7/2013     |

## Equipment Under Test (\* = EUT):

| Function                 | Manufacturer | Model # | S/N   |
|--------------------------|--------------|---------|-------|
| 5GHz Tri-Sector (17dBi)* | Digital Path | G5RL10T | EMI 1 |

## Support Devices:

| Function            | Manufacturer | Model #       | S/N             |
|---------------------|--------------|---------------|-----------------|
| Laptop Computer     | HP           | ProBook 6565b | 5CB13637ZF      |
| Laptop Power Supply | HP           | 608428-002    | F12941126327228 |

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## Test Conditions / Notes:

The EUT installed on a metal pole as intended. DC power port is connected to a DC power supply via a CAT5 cable. The Ethernet port is connected to a remote laptop via unshielded twisted pair.

The Remote laptop is running test software to exercise the intended functionalities. Receiver circuit is active.

Radio 0, TX

Radio 1, OFF

5250-5350HHz

Freq: 5275MHz, 5300MHz, 5325MHz.

BW = 10 MHz

802.11a: 24Mbps, TX power setting= 11,11,11

802.11n: 13MCSHT20 2S,TX power setting= 11,11,11

Freq: 5280MHz, 5300MHz, 5320MHz.

BW = 20MHz

802.11a: 9 Mbps, TX power setting= 12.5,13.5,13.5

802.11n: 6.5MCS HT20 1S, TX power setting= 12, 13.5,12

Temperature: 21.9°C, Relative Humidity: 38-43%, Atmospheric Pressure: 101.5kPa

No emission found. Detection was performed with reduced resolution bandwidth, recorded data represent noise floor level at required BW.

Frequency range of measurement = 9kHz-40GHz.

9 kH -150 kHz; RBW=200 Hz, VBW=200 Hz;150 kHz-30 MHz; RBW=9 kHz, VBW=9 kHz;30 MHz-1000 MHz; RBW=120 kHz, VBW=120 kHz,1000 MHz-40,000 MHz; RBW=1 MHz, VBW=1 MHz.

Recorded emission level is below the EIRP limit of -27dBm/MHz (68.2dBuV/m @ 3 meter) IAW 789033 D01 General UNII Test Procedures V01r01

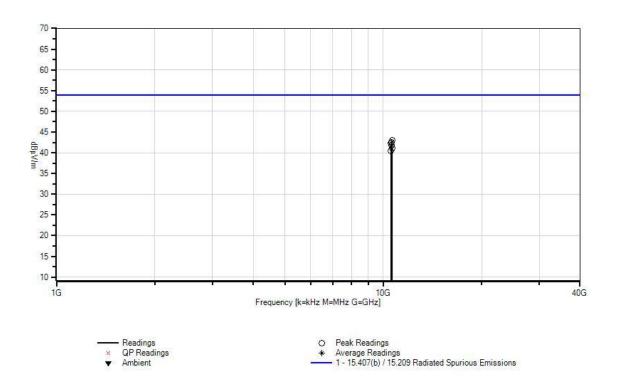
Ext Attn: 0 dB

| Measu | rement Data: | Reading listed by margin. |      |       | Test Distance: 3 Meters |      |       |             |             |        |       |
|-------|--------------|---------------------------|------|-------|-------------------------|------|-------|-------------|-------------|--------|-------|
| #     | Freq         | Rdng                      | T1   | T2    | Т3                      | T4   | Dist  | Corr        | Spec        | Margin | Polar |
|       |              |                           | T5   | T6    | T7                      |      |       |             |             |        |       |
|       | MHz          | dΒμV                      | dB   | dB    | dB                      | dB   | Table | $dB\mu V/m$ | $dB\mu V/m$ | dB     | Ant   |
| 1     | 10641.000    | 51.3                      | +0.0 | +39.3 | +2.3                    | +6.7 | +0.0  | 43.0        | 54.0        | -11.0  | Horiz |
|       | M            |                           | +2.1 | -58.7 | +0.0                    |      |       |             |             |        |       |
|       |              |                           |      |       |                         |      |       |             |             |        |       |
| 2     | 10602.800    | 51.2                      | +0.0 | +39.3 | +2.3                    | +6.7 | +0.0  | 42.5        | 54.0        | -11.5  | Horiz |
|       | M            |                           | +2.1 | -59.1 | +0.0                    |      |       |             |             |        |       |
|       |              |                           |      |       |                         |      |       |             |             |        |       |
| 3     | 10546.000    | 51.1                      | +0.0 | +39.3 | +2.3                    | +6.7 | +0.0  | 42.3        | 54.0        | -11.7  | Vert  |
|       | M            |                           | +2.1 | -59.2 | +0.0                    |      |       |             |             |        |       |
|       |              |                           |      |       |                         |      |       |             |             |        |       |
| 4     | 10574.600    | 50.9                      | +0.0 | +39.3 | +2.3                    | +6.7 | +0.0  | 41.9        | 54.0        | -12.1  | Horiz |
|       | M            |                           | +2.1 | -59.4 | +0.0                    |      |       |             |             |        |       |
|       |              |                           |      |       |                         |      |       |             |             |        |       |
| 5     | 10640.000    | 49.4                      | +0.0 | +39.3 | +2.3                    | +6.7 | +0.0  | 41.1        | 54.0        | -12.9  | Horiz |
|       | M            |                           | +2.1 | -58.7 | +0.0                    |      |       |             |             |        |       |
|       |              |                           |      |       |                         |      |       |             |             |        |       |
| 6     | 10551.000    | 49.2                      | +0.0 | +39.3 | +2.3                    | +6.7 | +0.0  | 40.4        | 54.0        | -13.6  | Vert  |
|       | M            |                           | +2.1 | -59.2 | +0.0                    |      |       |             |             |        |       |
|       |              |                           |      |       |                         |      |       |             |             |        |       |

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CKC Laboratories, Inc. Date: 5/27/2012 Time: 08:11:46 Digital Path WO#: 92682 15.407(b) / 15.209 Radiated Spurious Emissions Test Distance: 3 Meters Sequence#: 200 Horiz UNII Bands. 20MHz Channel width.





Customer: **Digital Path** 

Specification: 15.407(b) / 15.209 Radiated Spurious Emissions

Work Order #:92682Date:5/27/2012Test Type:Radiated ScanTime:09:17:11Equipment:5GHz Tri-Sector (17dBi)Sequence#:201Manufacturer:Digital PathTested By:E. Wong

Model: G5RL10T S/N: EMI 1

# Test Equipment:

| I csi Equi |          |                   |                 |                  |              |
|------------|----------|-------------------|-----------------|------------------|--------------|
| ID         | Asset #  | Description       | Model           | Calibration Date | Cal Due Date |
| T1         | AN02668  | Spectrum Analyzer | E4446A          | 2/23/2011        | 2/23/2013    |
| T2         | AN02157  | Horn Antenna-ANSI | 3115            | 1/17/2011        | 1/17/2013    |
|            |          | C63.5             |                 |                  |              |
| Т3         | AN03302  | Cable             | 32026-29094K-   | 3/21/2012        | 3/21/2014    |
|            |          |                   | 29094K-72TC     |                  |              |
| T4         | ANP01210 | Cable             | FSJ1P-50A-4A    | 3/15/2011        | 3/15/2013    |
| T5         | ANP05913 | Cable             | 32022-29094K-   | 8/30/2011        | 8/30/2013    |
|            |          |                   | 65TC            |                  |              |
| Т6         | AN03114  | Preamp            | AMF-7D-         | 5/13/2011        | 5/13/2013    |
|            |          |                   | 00101800-30-10P |                  |              |
|            | ANP05935 | Attenuator        | 84A-10          | 10/19/2011       | 10/19/2013   |
|            | ANP01211 | Attenuator        | 23-10-34        | 4/15/2011        | 4/15/2013    |
| T7         | AN01417  | High Pass Filter  | 84300-80039     | 2/9/2012         | 2/9/2014     |
| Т8         | AN02694  | Active Horn       | AMFW-5F-        | 11/10/2010       | 11/10/2012   |
|            |          | Antenna-ANSI      | 18002650-20-10P |                  |              |
|            |          | C63.5 Antenna     |                 |                  |              |
|            |          | Factors (dB)      |                 |                  |              |
|            | AN02695  | Active Horn       | AMFW-5F-        | 11/10/2010       | 11/10/2012   |
|            |          | Antenna-ANSI      | 260400-33-8P    |                  |              |
|            |          | C63.5 Antenna     |                 |                  |              |
|            |          | Factors (dB)      |                 |                  |              |
| Т9         | ANP05911 | Cable             | 32022-29094K-   | 8/30/2011        | 8/30/2013    |
|            |          |                   | 65TC            |                  |              |
|            | AN00730  | Preamp            |                 | 1/31/2011        | 1/31/2013    |
|            | AN00432  | Loop Antenna      | 6502            | 3/31/2011        | 3/31/2013    |
|            | AN00852  | Biconilog Antenna | CBL 6111C       | 11/16/2010       | 11/16/2012   |
|            | ANP05299 | Cable             | RG214           | 3/6/2011         | 3/6/2013     |
|            | ANP05300 | Cable             | RG214/U         | 3/7/2011         | 3/7/2013     |
|            | ANP05440 | Cable             |                 | 3/7/2011         | 3/7/2013     |

# Equipment Under Test (\* = EUT):

| Function                 | Manufacturer | Model # | S/N   |
|--------------------------|--------------|---------|-------|
| 5GHz Tri-Sector (17dBi)* | Digital Path | G5RL10T | EMI 1 |

# Support Devices:

| Function            | Manufacturer | Model #       | S/N             |
|---------------------|--------------|---------------|-----------------|
| Laptop Computer     | HP           | ProBook 6565b | 5CB13637ZF      |
| Laptop Power Supply | HP           | 608428-002    | F12941126327228 |

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The EUT installed on a metal pole as intended. DC power port is connected to a DC power supply via a CAT5 cable. The Ethernet port is connected to a remote laptop via unshielded twisted pair.

The Remote laptop is running test software to exercise the intended functionalities. receiver circuit is active Radio 0, TX

Radio 1, OFF

5470-5725MHz

Freq: 5495MHz, 5590MHz, 5705MHz.

BW = 10 MHz

802.11a: 24Mbps, TX power setting= 12,12,12

802.11n: 13MCS HT20 2S,TX power setting= 12,12,12

Freq: 5500MHz, 5590MHz, 5700MHz.

BW = 20MHz

802.11a: 24 Mbps, TX power setting= 14.5, 14.5, 14.5

802.11n: 6.5MCS HT20 1S, TX power setting= 14.5, 14.5, 14.5

Temperature: 21.9°C, Relative Humidity: 38-43%, Atmospheric Pressure: 101.5kPa

No emission found. Detection was performed with reduced resolution bandwidth, recorded data represent noise floor level at the required BW.

Frequency range of measurement = 9kHz-40GHz.

9 kH -150 kHz; RBW=200 Hz, VBW=200 Hz; 150 kHz-30 MHz; RBW=9 kHz, VBW=9 kHz;30 MHz-1000 MHz; RBW=120 kHz, VBW=120 kHz,1000 MHz-40,000 MHz; RBW=1 MHz, VBW=1 MHz.

Recorded emission level is below the EIRP limit of -27dBm/MHz (68.2dBuV/m @ 3 meter) IAW 789033 D01 General UNII Test Procedures V01r01

Ext Attn: 0 dB

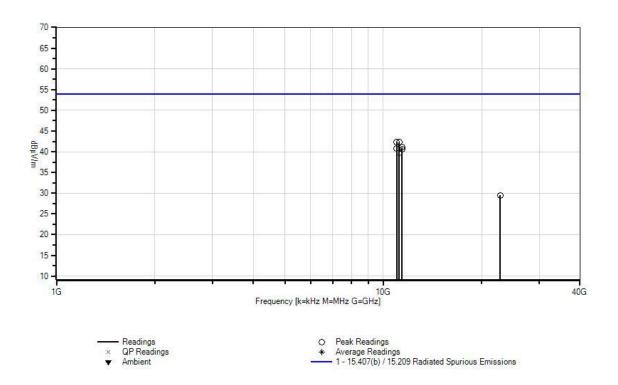
| Measu | rement Data: | Re   | ading lis | ted by ma | ırgin. |      | Τe    | est Distance | e: 3 Meters |        |       |
|-------|--------------|------|-----------|-----------|--------|------|-------|--------------|-------------|--------|-------|
| #     | Freq         | Rdng | T1        | T2        | T3     | T4   | Dist  | Corr         | Spec        | Margin | Polar |
|       |              |      | T5        | T6        | T7     | T8   |       |              |             |        |       |
|       |              |      | T9        |           |        |      |       |              |             |        |       |
|       | MHz          | dΒμV | dB        | dB        | dB     | dB   | Table | $dB\mu V/m$  | $dB\mu V/m$ | dB     | Ant   |
| 1     | 11001.600    | 49.7 | +0.0      | +39.4     | +2.3   | +6.8 | +0.0  | 42.4         | 54.0        | -11.6  | Vert  |
|       | M            |      | +2.2      | -58.0     | +0.0   | +0.0 |       |              |             |        |       |
|       |              |      | +0.0      |           |        |      |       |              |             |        |       |
| 2     | 11176.680    | 49.2 | +0.0      | +39.1     | +2.3   | +6.8 | +0.0  | 42.3         | 54.0        | -11.7  | Vert  |
|       | M            |      | +2.2      | -57.3     | +0.0   | +0.0 |       |              |             |        |       |
|       |              |      | +0.0      |           |        |      |       |              |             |        |       |
| 3     | 11400.000    | 48.1 | +0.0      | +38.8     | +2.3   | +6.9 | +0.0  | 41.1         | 54.0        | -12.9  | Horiz |
|       | M            |      | +2.2      | -57.2     | +0.0   | +0.0 |       |              |             |        |       |
|       |              |      | +0.0      |           |        |      |       |              |             |        |       |
| 4     | 10988.400    | 48.1 | +0.0      | +39.4     | +2.3   | +6.8 | +0.0  | 40.8         | 54.0        | -13.2  | Horiz |
|       | M            |      | +2.2      | -58.0     | +0.0   | +0.0 |       |              |             |        |       |
|       |              |      | +0.0      |           |        |      |       |              |             |        |       |

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| 5 11410.000<br>M | 47.6 | +0.0<br>+2.2 | +38.8 | +2.3<br>+0.0 | +6.9<br>+0.0 | +0.0 | 40.7 | 54.0 | -13.3 | Horiz |
|------------------|------|--------------|-------|--------------|--------------|------|------|------|-------|-------|
|                  |      | +0.0         |       |              |              |      |      |      |       |       |
| 6 11180.591      | 46.7 | +0.0         | +39.1 | +2.3         | +6.8         | +0.0 | 39.8 | 54.0 | -14.2 | Horiz |
| M                |      | +2.2         | -57.3 | +0.0         | +0.0         |      |      |      |       |       |
|                  |      | +0.0         |       |              |              |      |      |      |       |       |
| 7 22797.000      | 51.2 | +0.0         | +0.0  | +0.0         | +0.0         | -9.5 | 29.5 | 54.0 | -24.5 | Horiz |
| M                |      | +0.0         | +0.0  | +0.0         | -16.5        |      |      |      |       |       |
|                  |      | +4.3         |       |              |              |      |      |      |       |       |

CKC Laboratories, Inc. Date: 5/27/2012 Time: 09:17:11 Digital Path WO#: 92682 15.407(b) / 15.209 Radiated Spurious Emissions Test Distance: 3 Meters Sequence#: 201 Horiz UNII Bands. 20MHz Channel width.





Customer: **Digital Path** 

Specification: 15.407(b) / 15.209 Radiated Spurious Emissions

Work Order #:92682Date:5/29/2012Test Type:Radiated ScanTime:21:45:00Equipment:5GHz Tri-Sector (20 dBi)Sequence#:203Manufacturer:Digital PathTested By:E. Wong

Model: G5RL10E S/N: EMI 3

# Test Equipment:

| 1 est Equi | pintenti |                   |                 |                  |              |
|------------|----------|-------------------|-----------------|------------------|--------------|
| ID         | Asset #  | Description       | Model           | Calibration Date | Cal Due Date |
| T1         | AN02668  | Spectrum Analyzer | E4446A          | 2/23/2011        | 2/23/2013    |
| T2         | AN02157  | Horn Antenna-ANSI | 3115            | 1/17/2011        | 1/17/2013    |
|            |          | C63.5             |                 |                  |              |
| T3         | AN03302  | Cable             | 32026-29094K-   | 3/21/2012        | 3/21/2014    |
|            |          |                   | 29094K-72TC     |                  |              |
| T4         | ANP01210 | Cable             | FSJ1P-50A-4A    | 3/15/2011        | 3/15/2013    |
| T5         | ANP05913 | Cable             | 32022-29094K-   | 8/30/2011        | 8/30/2013    |
|            |          |                   | 65TC            |                  |              |
| Т6         | AN03114  | Preamp            | AMF-7D-         | 5/13/2011        | 5/13/2013    |
|            |          |                   | 00101800-30-10P |                  |              |
|            | ANP05935 | Attenuator        | 84A-10          | 10/19/2011       | 10/19/2013   |
|            | ANP01211 | Attenuator        | 23-10-34        | 4/15/2011        | 4/15/2013    |
| T7         | AN01417  | High Pass Filter  | 84300-80039     | 2/9/2012         | 2/9/2014     |
|            | AN02694  | Active Horn       | AMFW-5F-        | 11/10/2010       | 11/10/2012   |
|            |          | Antenna-ANSI      | 18002650-20-10P |                  |              |
|            |          | C63.5 Antenna     |                 |                  |              |
|            |          | Factors (dB)      |                 |                  |              |
|            | AN02695  | Active Horn       | AMFW-5F-        | 11/10/2010       | 11/10/2012   |
|            |          | Antenna-ANSI      | 260400-33-8P    |                  |              |
|            |          | C63.5 Antenna     |                 |                  |              |
|            |          | Factors (dB)      |                 |                  |              |
|            | ANP05911 | Cable             | 32022-29094K-   | 8/30/2011        | 8/30/2013    |
|            |          |                   | 65TC            |                  |              |
|            | AN00730  | Preamp            |                 | 1/31/2011        | 1/31/2013    |
|            | AN00432  | Loop Antenna      | 6502            | 3/31/2011        | 3/31/2013    |
|            | AN00852  | Biconilog Antenna | CBL 6111C       | 11/16/2010       | 11/16/2012   |
|            | ANP05299 | Cable             | RG214           | 3/6/2011         | 3/6/2013     |
|            | ANP05300 | Cable             | RG214/U         | 3/7/2011         | 3/7/2013     |
|            | ANP05440 | Cable             |                 | 3/7/2011         | 3/7/2013     |

# Equipment Under Test (\* = EUT):

| Function                  | Manufacturer | Model # | S/N   |
|---------------------------|--------------|---------|-------|
| 5GHz Tri-Sector (20 dBi)* | Digital Path | G5RL10E | EMI 3 |

#### Support Devices:

| Function            | Manufacturer | Model #       | S/N             |
|---------------------|--------------|---------------|-----------------|
| Laptop Computer     | HP           | ProBook 6565b | 5CB13637ZF      |
| Laptop Power Supply | HP           | 608428-002    | F12941126327228 |

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The EUT installed on a metal pole as intended. DC power port is connected to a DC power supply via a CAT5 cable. The Ethernet port is connected to a remote laptop via unshielded twisted pair.

The Remote laptop is running test software to exercise the intended functionalities. Receiver circuit is active Vertical polarity of the antenna is connected to Card 1, Ant port 2

Horizontal polarity of the antenna is connected to Card 1, Ant port 0

Radio 0, OFF Radio 1, TX

5250-5350MHz

Freq: 5275MHz, 5300MHz, 5325MHz.

BW = 10 MHz

802.11a: 24Mbps, TX power= 10.5,10.5,10.5

802.11n: 13MCSHT20 2S,TX power= 10.5,10.5,10.5

Freq: 5280MHz, 5300MHz, 5320MHz.

BW = 20MHz

802.11a: 9 Mbps, TX power= 10.5,10.5,10.5

802.11n: 6.5MCS HT20 1S, TX power= 10.5,10.5,10.5

Temperature: 21.9°C, Relative Humidity: 38-43%, Atmospheric Pressure: 101.5kPa

No emission found. Detection was performed with reduced resolution bandwidth, recorded data represent noise floor level at required BW.

Frequency range of measurement = 9kHz-40GHz.

9 kH -150 kHz; RBW=200 Hz, VBW=200 Hz;150 kHz-30 MHz; RBW=9 kHz, VBW=9 kHz;30 MHz-1000 MHz; RBW=120 kHz, VBW=120 kHz,1000 MHz-40,000 MHz; RBW=1 MHz, VBW=1 MHz.

Recorded emission level is below the EIRP limit of -27dBm/MHz (68.2dBuV/m @ 3 meter) IAW 789033 D01 General UNII Test Procedures V01r01

Ext Attn: 0 dB

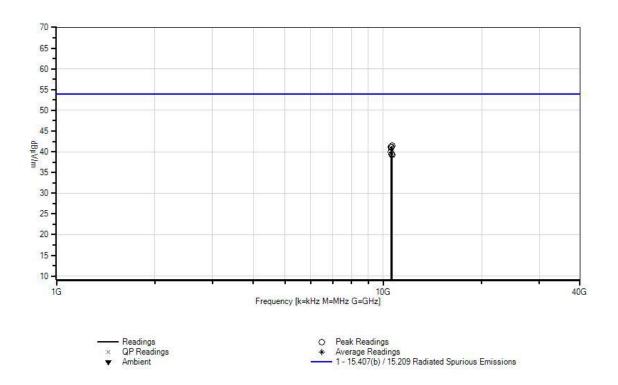
| Measu | rement Data: | Re   | eading list | ted by ma | ırgin. |      | Τe    | est Distance | e: 3 Meters |        |       |
|-------|--------------|------|-------------|-----------|--------|------|-------|--------------|-------------|--------|-------|
| #     | Freq         | Rdng | T1          | T2        | T3     | T4   | Dist  | Corr         | Spec        | Margin | Polar |
|       |              |      | T5          | T6        | T7     |      |       |              |             |        |       |
|       | MHz          | dΒμV | dB          | dB        | dB     | dB   | Table | $dB\mu V/m$  | $dB\mu V/m$ | dB     | Ant   |
| 1     | 10640.000    | 49.7 | +0.0        | +39.3     | +2.3   | +6.7 | +0.0  | 41.4         | 54.0        | -12.6  | Vert  |
|       | M            |      | +2.1        | -58.7     | +0.0   |      |       |              |             |        |       |
|       |              |      |             |           |        |      |       |              |             |        |       |
| 2     | 10557.700    | 50.1 | +0.0        | +39.3     | +2.3   | +6.7 | +0.0  | 41.2         | 54.0        | -12.8  | Vert  |
|       | M            |      | +2.1        | -59.3     | +0.0   |      |       |              |             |        |       |
|       |              |      |             |           |        |      |       |              |             |        |       |
| 3     | 10601.000    | 49.8 | +0.0        | +39.3     | +2.3   | +6.7 | +0.0  | 41.1         | 54.0        | -12.9  | Vert  |
|       | M            |      | +2.1        | -59.1     | +0.0   |      |       |              |             |        |       |
|       |              |      |             |           |        |      |       |              |             |        |       |

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| 4 10550.000<br>M | 48.7 | +0.0<br>+2.1 | +39.3<br>-59.2 | +2.3<br>+0.0 | +6.7 | +0.0 | 39.9 | 54.0 | -14.1 | Vert  |
|------------------|------|--------------|----------------|--------------|------|------|------|------|-------|-------|
| 5 10600.000<br>M | 48.1 | +0.0<br>+2.1 | +39.3<br>-59.1 | +2.3<br>+0.0 | +6.7 | +0.0 | 39.4 | 54.0 | -14.6 | Vert  |
| 6 10650.140<br>M | 47.5 | +0.0<br>+2.1 | +39.3<br>-58.6 | +2.3<br>+0.0 | +6.7 | +0.0 | 39.3 | 54.0 | -14.7 | Horiz |

CKC Laboratories, Inc. Date: 5/29/2012 Time: 21:45:00 Digital Path WO#: 92682 15.407(b) / 15.209 Radiated Spurious Emissions Test Distance: 3 Meters Sequence#: 203 Vert UNII Bands. 20MHz Channel width.





Customer: **Digital Path** 

Specification: 15.407(b) / 15.209 Radiated Spurious Emissions

Work Order #:92682Date:5/29/2012Test Type:Radiated ScanTime:22:12:00Equipment:5GHz Tri-Sector (20 dBi)Sequence#:204Manufacturer:Digital PathTested By:E. Wong

Model: G5RL10E S/N: EMI 3

# Test Equipment:

| 1 est Equi | pintenti |                   |                 |                  |              |
|------------|----------|-------------------|-----------------|------------------|--------------|
| ID         | Asset #  | Description       | Model           | Calibration Date | Cal Due Date |
| T1         | AN02668  | Spectrum Analyzer | E4446A          | 2/23/2011        | 2/23/2013    |
| T2         | AN02157  | Horn Antenna-ANSI | 3115            | 1/17/2011        | 1/17/2013    |
|            |          | C63.5             |                 |                  |              |
| T3         | AN03302  | Cable             | 32026-29094K-   | 3/21/2012        | 3/21/2014    |
|            |          |                   | 29094K-72TC     |                  |              |
| T4         | ANP01210 | Cable             | FSJ1P-50A-4A    | 3/15/2011        | 3/15/2013    |
| T5         | ANP05913 | Cable             | 32022-29094K-   | 8/30/2011        | 8/30/2013    |
|            |          |                   | 65TC            |                  |              |
| T6         | AN03114  | Preamp            | AMF-7D-         | 5/13/2011        | 5/13/2013    |
|            |          |                   | 00101800-30-10P |                  |              |
|            | ANP05935 | Attenuator        | 84A-10          | 10/19/2011       | 10/19/2013   |
|            | ANP01211 | Attenuator        | 23-10-34        | 4/15/2011        | 4/15/2013    |
| T7         | AN01417  | High Pass Filter  | 84300-80039     | 2/9/2012         | 2/9/2014     |
|            | AN02694  | Active Horn       | AMFW-5F-        | 11/10/2010       | 11/10/2012   |
|            |          | Antenna-ANSI      | 18002650-20-10P |                  |              |
|            |          | C63.5 Antenna     |                 |                  |              |
|            |          | Factors (dB)      |                 |                  |              |
|            | AN02695  | Active Horn       | AMFW-5F-        | 11/10/2010       | 11/10/2012   |
|            |          | Antenna-ANSI      | 260400-33-8P    |                  |              |
|            |          | C63.5 Antenna     |                 |                  |              |
|            |          | Factors (dB)      |                 |                  |              |
|            | ANP05911 | Cable             | 32022-29094K-   | 8/30/2011        | 8/30/2013    |
|            |          |                   | 65TC            |                  |              |
|            | AN00730  | Preamp            |                 | 1/31/2011        | 1/31/2013    |
|            | AN00432  | Loop Antenna      | 6502            | 3/31/2011        | 3/31/2013    |
|            | AN00852  | Biconilog Antenna | CBL 6111C       | 11/16/2010       | 11/16/2012   |
|            | ANP05299 | Cable             | RG214           | 3/6/2011         | 3/6/2013     |
|            | ANP05300 | Cable             | RG214/U         | 3/7/2011         | 3/7/2013     |
|            | ANP05440 | Cable             |                 | 3/7/2011         | 3/7/2013     |

Equipment Under Test (\* = EUT):

| Function                  | Manufacturer | Model # | S/N   |
|---------------------------|--------------|---------|-------|
| 5GHz Tri-Sector (20 dBi)* | Digital Path | G5RL10E | EMI 3 |

Support Devices:

| Function            | Manufacturer | Model #       | S/N             |
|---------------------|--------------|---------------|-----------------|
| Laptop Computer     | HP           | ProBook 6565b | 5CB13637ZF      |
| Laptop Power Supply | HP           | 608428-002    | F12941126327228 |

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The EUT installed on a metal pole as intended. DC power port is connected to a DC power supply via a CAT5 cable. The Ethernet port is connected to a remote laptop via unshielded twisted pair.

The Remote laptop is running test software to exercise the intended functionalities. Receiver circuit is active.

Vertical polarity of the antenna is connected to Card 1, Ant port 2

Horizontal polarity of the antenna is connected to Card 1, Ant port 0

Radio 0, OFF Radio 1, TX

5470-5725MHz

Freq: 5495MHz, 5590MHz, 5705MHz.

BW = 10 MHz

802.11a: 24Mbps, TX power setting= 11.5, 11.5, 11.5

802.11n: 13MCS HT20 2S,TX power setting = 11.5, 11.5, 11.5

Freq: 5500MHz, 5590MHz, 5700MHz.

BW = 20MHz

802.11a: 24 Mbps, TX power setting= 10.5, 14.10.5

802.11n: 6.5MCS HT20 1S, TX power setting= 12, 14.8.5

Temperature: 21.9°C, Relative Humidity: 38-43%, Atmospheric Pressure: 101.5kPa

No emission found. Detection was performed with reduced resolution bandwidth, recorded data represent noise floor level at required BW.

Frequency range of measurement = 9kHz-40GHz.

9 kH -150 kHz; RBW=200 Hz, VBW=200 Hz;150 kHz-30 MHz; RBW=9 kHz, VBW=9 kHz;30 MHz-1000 MHz; RBW=120 kHz, VBW=120 kHz,1000 MHz-40,000 MHz; RBW=1 MHz, VBW=1 MHz.

Recorded emission level is below the EIRP limit of -27dBm/MHz (68.2dBuV/m @ 3 meter) IAW 789033 D01 General UNII Test Procedures V01r01

Ext Attn: 0 dB

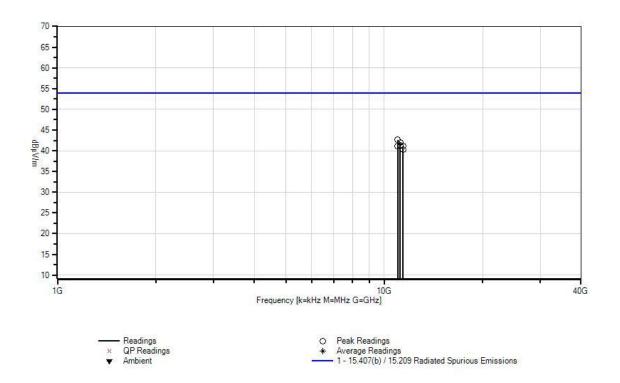
| Measu | rement Data: | Re        | eading list | ted by ma | ırgin. |      | Τe    | est Distance   | e: 1 Meter     |        |       |
|-------|--------------|-----------|-------------|-----------|--------|------|-------|----------------|----------------|--------|-------|
| #     | Freq         | Rdng      | T1          | T2        | T3     | T4   | Dist  | Corr           | Spec           | Margin | Polar |
|       |              |           | T5          | T6        | T7     |      |       |                |                |        |       |
|       | MHz          | $dB\mu V$ | dB          | dB        | dB     | dB   | Table | $dB\mu V/m \\$ | $dB\mu V/m \\$ | dB     | Ant   |
| 1     | 11000.300    | 49.9      | +0.0        | +39.4     | +2.3   | +6.8 | +0.0  | 42.6           | 54.0           | -11.4  | Vert  |
|       | M            |           | +2.2        | -58.0     | +0.0   |      |       |                |                |        |       |
|       |              |           |             |           |        |      |       |                |                |        |       |
| 2     | 11180.200    | 48.9      | +0.0        | +39.1     | +2.3   | +6.8 | +0.0  | 42.0           | 54.0           | -12.0  | Horiz |
|       | M            |           | +2.2        | -57.3     | +0.0   |      |       |                |                |        |       |
|       |              |           |             |           |        |      |       |                |                |        |       |
| 3     | 11181.400    | 48.2      | +0.0        | +39.1     | +2.3   | +6.8 | +0.0  | 41.3           | 54.0           | -12.7  | Horiz |
|       | M            |           | +2.2        | -57.3     | +0.0   |      |       |                |                |        |       |
|       |              |           |             |           |        |      |       |                |                |        |       |

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| 4 10989.000<br>M | 48.4 | +0.0<br>+2.2 | +39.4<br>-58.0 | +2.3<br>+0.0 | +6.8 | +0.0 | 41.1 | 54.0 | -12.9 | Vert |
|------------------|------|--------------|----------------|--------------|------|------|------|------|-------|------|
| 5 11400.000<br>M | 48.1 | +0.0<br>+2.2 | +38.8<br>-57.2 | +2.3<br>+0.0 | +6.9 | +0.0 | 41.1 | 54.0 | -12.9 | Vert |
| 6 11410.000<br>M | 47.1 | +0.0<br>+2.2 | +38.8<br>-57.1 | +2.3<br>+0.0 | +6.9 | +0.0 | 40.2 | 54.0 | -13.8 | Vert |

CKC Laboratories, Inc. Date: 5/29/2012 Time: 22:12:00 Digital Path WO#: 92682 15.407(b) / 15.209 Radiated Spurious Emissions Test Distance: 1 Meter Sequence#: 204 Vert UNII Bands. 20MHz Channel width.





Customer: **Digital Path** 

Specification: 15.407(b) / 15.209 Radiated Spurious Emissions

Work Order #:92682Date:6/1/2012Test Type:Radiated ScanTime:10:46:49Equipment:5GHz Panel (18dBi) + Omni (11dBi)Sequence#:206Manufacturer:Digital PathTested By:E. Wong

Model: G5RL10G S/N: EMI 2

# Test Equipment:

| 1 est Equi | pintenti |                   |                 |                  |              |
|------------|----------|-------------------|-----------------|------------------|--------------|
| ID         | Asset #  | Description       | Model           | Calibration Date | Cal Due Date |
| T1         | AN02668  | Spectrum Analyzer | E4446A          | 2/23/2011        | 2/23/2013    |
| T2         | AN02157  | Horn Antenna-ANSI | 3115            | 1/17/2011        | 1/17/2013    |
|            |          | C63.5             |                 |                  |              |
| T3         | AN03302  | Cable             | 32026-29094K-   | 3/21/2012        | 3/21/2014    |
|            |          |                   | 29094K-72TC     |                  |              |
| T4         | ANP01210 | Cable             | FSJ1P-50A-4A    | 3/15/2011        | 3/15/2013    |
| T5         | ANP05913 | Cable             | 32022-29094K-   | 8/30/2011        | 8/30/2013    |
|            |          |                   | 65TC            |                  |              |
| Т6         | AN03114  | Preamp            | AMF-7D-         | 5/13/2011        | 5/13/2013    |
|            |          |                   | 00101800-30-10P |                  |              |
|            | ANP05935 | Attenuator        | 84A-10          | 10/19/2011       | 10/19/2013   |
|            | ANP01211 | Attenuator        | 23-10-34        | 4/15/2011        | 4/15/2013    |
| T7         | AN01417  | High Pass Filter  | 84300-80039     | 2/9/2012         | 2/9/2014     |
| T8         | AN02694  | Active Horn       | AMFW-5F-        | 11/10/2010       | 11/10/2012   |
|            |          | Antenna-ANSI      | 18002650-20-10P |                  |              |
|            |          | C63.5 Antenna     |                 |                  |              |
|            |          | Factors (dB)      |                 |                  |              |
|            | AN02695  | Active Horn       | AMFW-5F-        | 11/10/2010       | 11/10/2012   |
|            |          | Antenna-ANSI      | 260400-33-8P    |                  |              |
|            |          | C63.5 Antenna     |                 |                  |              |
|            |          | Factors (dB)      |                 |                  |              |
| T9         | ANP05911 | Cable             | 32022-29094K-   | 8/30/2011        | 8/30/2013    |
|            |          |                   | 65TC            |                  |              |
|            | AN00730  | Preamp            |                 | 1/31/2011        | 1/31/2013    |
|            | AN00432  | Loop Antenna      | 6502            | 3/31/2011        | 3/31/2013    |
|            | AN00852  | Biconilog Antenna | CBL 6111C       | 11/16/2010       | 11/16/2012   |
|            | ANP05299 | Cable             | RG214           | 3/6/2011         | 3/6/2013     |
|            | ANP05300 | Cable             | RG214/U         | 3/7/2011         | 3/7/2013     |
|            | ANP05440 | Cable             |                 | 3/7/2011         | 3/7/2013     |

# Equipment Under Test (\* = EUT):

| Function             | Manufacturer | Model # | S/N   |
|----------------------|--------------|---------|-------|
| 5GHz Panel (18dBi) + | Digital Path | G5RL10G | EMI 2 |
| Omni (11dBi)*        |              |         |       |

# Support Devices:

| Function            | Manufacturer | Model #       | S/N             |
|---------------------|--------------|---------------|-----------------|
| Laptop Computer     | HP           | ProBook 6565b | 5CB13637ZF      |
| Laptop Power Supply | HP           | 608428-002    | F12941126327228 |

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The EUT installed on a pole as intended. DC power port is connected to a DC power supply via a CAT5 cable. The Ethernet port is connected to a remote laptop via unshielded twisted pair.

The Remote laptop is running test software to exercise the intended functionalities. Receiver circuit is activated.

11dBi Omni antenna is connected to radio 0 (instance 1) 18 dBi panel antenna is connected to radio1 (instance 2)

This data sheet is for the EUT transmitting via 11dBi Omni antenna connected to radio 0 (instance 1)

Freq: 5275MHz, 5300MHz, 5325MHz.

BW = 10 MHz

802.11a: 24Mbps, TX power setting= 17.5, 17.5, 17.5

802.11n: 13MCSHT20 2S,TX power setting= 17.5, 17.5, 17.5

Freq: 5280MHz, 5300MHz, 5320MHz.

BW = 20MHz

802.11a: 9 Mbps, TX power= 19, 19, 18

802.11n: 6.5MCS HT20 1S, TX power= 19, 19, 18

Temperature: 21.9°C, Relative Humidity: 38-43%, Atmospheric Pressure: 101.5kPa

Frequency range of measurement = 9kHz-40GHz.

9 kH -150 kHz; RBW=200 Hz, VBW=200 Hz;150 kHz-30 MHz; RBW=9 kHz, VBW=9 kHz;30 MHz-1000 MHz; RBW=120 kHz, VBW=120 kHz,1000 MHz-40,000 MHz; RBW=1 MHz, VBW=1 MHz.

Recorded emission level is below the EIRP limit of -27dBm/MHz (68.2dBuV/m @ 3 meter) IAW 789033 D01 General UNII Test Procedures V01r01

Ext Attn: 0 dB

| Measu | rement Data: | Re   | eading lis | ted by ma | argin. |      | Τe    | est Distanc    | e: 3 Meters |        |       |
|-------|--------------|------|------------|-----------|--------|------|-------|----------------|-------------|--------|-------|
| #     | Freq         | Rdng | T1         | T2        | T3     | T4   | Dist  | Corr           | Spec        | Margin | Polar |
|       |              |      | T5         | T6        | T7     | T8   |       |                |             |        |       |
|       |              |      | T9         |           |        |      |       |                |             |        |       |
|       | MHz          | dΒμV | dB         | dB        | dB     | dB   | Table | $dB\mu V/m \\$ | $dB\mu V/m$ | dB     | Ant   |
| 1     | 10595.200    | 56.6 | +0.0       | +39.3     | +2.3   | +6.7 | +0.0  | 47.8           | 54.0        | -6.2   | Vert  |
|       | M            |      | +2.1       | -59.2     | +0.0   | +0.0 |       |                |             |        |       |
|       |              |      | +0.0       |           |        |      |       |                | 20MHz 80    | 2-11b- |       |
|       |              |      |            |           |        |      |       |                | 6.5MCSH     | Γ201S  |       |
| 2     | 10569.600    | 54.9 | +0.0       | +39.3     | +2.3   | +6.7 | +0.0  | 45.9           | 54.0        | -8.1   | Horiz |
|       | M            |      | +2.1       | -59.4     | +0.0   | +0.0 |       |                |             |        |       |
|       |              |      | +0.0       |           |        |      |       |                | 20MHz 80    | 2-11b- |       |
|       |              |      |            |           |        |      |       |                | 6.5MCSH     | Γ201S  |       |
| 3     | 10551.900    | 53.0 | +0.0       | +39.3     | +2.3   | +6.7 | +0.0  | 44.2           | 54.0        | -9.8   | Vert  |
|       | M            |      | +2.1       | -59.2     | +0.0   | +0.0 |       |                |             |        |       |
|       |              |      | +0.0       |           |        |      |       |                | 10MHz-80    | 2.11n  |       |
|       |              |      |            |           |        |      |       |                | 13MCSHT     | 202S   |       |
| 4     | 10649.000    | 51.8 | +0.0       | +39.3     | +2.3   | +6.7 | +0.0  | 43.6           | 54.0        | -10.4  | Horiz |
|       | M            |      | +2.1       | -58.6     | +0.0   | +0.0 |       |                |             |        |       |
|       | Ave          |      | +0.0       |           |        |      |       |                | 10MHz       |        |       |
|       |              |      |            |           |        |      |       |                | 802.11a_24  | 4Mbps  |       |

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| ^  | 10640 000      | C 1 1 | .00          | +20.2          | .2.2           | 7             | .0.0   | 55.0              | 54 O                  | .1.0  | II     |
|----|----------------|-------|--------------|----------------|----------------|---------------|--------|-------------------|-----------------------|-------|--------|
| ^  | 10649.000<br>M | 64.1  | +0.0 +2.1    | +39.3<br>-58.6 | $+2.3 \\ +0.0$ | +6.7<br>+0.0  | +0.0   | 55.9              | 54.0                  | +1.9  | Horiz  |
|    | 141            |       | +0.0         | 30.0           | 10.0           | 10.0          |        |                   | 10MHz                 |       |        |
|    |                |       |              |                |                |               |        |                   | 802.11a_24            | Mbps  |        |
| 6  | 10560.000      | 51.9  | +0.0         | +39.3          | +2.3           | +6.7          | +0.0   | 43.0              | 54.0                  | -11.0 | Vert   |
|    | M              |       | +2.1         | -59.3          | +0.0           | +0.0          |        |                   |                       |       |        |
|    |                |       | +0.0         |                |                |               |        |                   | 20MHz 802             |       |        |
|    | 10650 100      | 40.1  | .0.0         | . 20. 2        | . 2. 2         |               | . 0. 0 | 40.0              | 6.5MCSHT              |       | 77 '   |
| 1  | 10650.100<br>M | 49.1  | +0.0 +2.1    | +39.3<br>-58.6 | +2.3 +0.0      | +6.7          | +0.0   | 40.9              | 54.0                  | -13.1 | Horiz  |
|    | Ave            |       | +2.1<br>+0.0 | -38.0          | +0.0           | +0.0          |        |                   | 10MHz-802             | ) 11n |        |
|    | 7100           |       | 10.0         |                |                |               |        |                   | 13MCSHT               |       |        |
| ٨  | 10650.100      | 63.8  | +0.0         | +39.3          | +2.3           | +6.7          | +0.0   | 55.6              | 54.0                  | +1.6  | Horiz  |
|    | M              |       | +2.1         | -58.6          | +0.0           | +0.0          |        |                   |                       |       |        |
|    |                |       | +0.0         |                |                |               |        |                   | 10MHz-802             |       |        |
|    |                |       |              |                |                |               |        |                   | 13MCSHT               |       |        |
| 9  | 10641.150      | 48.1  | +0.0         | +39.3          | +2.3           | +6.7          | +0.0   | 39.8              | 54.0                  | -14.2 | Horiz  |
|    | M              |       | +2.1 +0.0    | -58.7          | +0.0           | +0.0          |        |                   | 20MHz 802             | 110   |        |
|    | Ave            |       | +0.0         |                |                |               |        |                   | 9Mbps                 | 2-11a |        |
| ٨  | 10641.150      | 60.8  | +0.0         | +39.3          | +2.3           | +6.7          | +0.0   | 52.5              | 54.0                  | -1.5  | Horiz  |
|    | M              |       | +2.1         | -58.7          | +0.0           | +0.0          |        |                   |                       |       |        |
|    |                |       | +0.0         |                |                |               |        |                   | 20MHz 802             | 2-11a |        |
|    |                |       |              |                |                |               |        |                   | 9Mbps                 |       |        |
| 11 | 15901.050      | 41.8  | +0.0         | +39.9          | +2.8           | +8.6          | +0.0   | 39.5              | 54.0                  | -14.5 | Horiz  |
|    | M              |       | +2.9         | -57.5          | +1.0           | +0.0          |        |                   | 10MHz                 |       |        |
|    | Ave            |       | +0.0         |                |                |               |        |                   | 802.11a_24            | Mhne  |        |
| ٨  | 15901.050      | 54.9  | +0.0         | +39.9          | +2.8           | +8.6          | +0.0   | 52.6              | 54.0                  | -1.4  | Horiz  |
|    | M              | 5 1.7 | +2.9         | -57.5          | +1.0           | +0.0          | 10.0   | 32.0              | 21.0                  | 1     | HOHE   |
|    |                |       | +0.0         |                |                |               |        |                   | 10MHz                 |       |        |
|    |                |       |              |                |                |               |        |                   | 802.11a_24            | Mbps  |        |
| 13 | 15824.700      | 41.4  | +0.0         | +40.1          | +2.8           | +8.5          | +0.0   | 39.3              | 54.0                  | -14.7 | Vert   |
|    | M              |       | +2.9         | -57.4          | +1.0           | +0.0          |        |                   | 101/11 00/            | N 11  |        |
|    | Ave            |       | +0.0         |                |                |               |        |                   | 10MHz-802<br>13MCSHT2 |       |        |
| ٨  | 15824.700      | 56.4  | +0.0         | +40.1          | +2.8           | +8.5          | +0.0   | 54.3              | 54.0                  | +0.3  | Vert   |
|    | M              | 50.4  |              | -57.4          | +1.0           | +0.0          | 10.0   | J <del>1</del> .J | 54.0                  | 10.5  | VCII   |
|    | -· <b>-</b>    |       | +0.0         | =              | . 2.0          | . 0.0         |        |                   | 10MHz-802             | 2.11n |        |
|    |                |       |              |                |                |               |        |                   | 13MCSHT               |       |        |
| 15 | 21098.000      | 50.2  | +0.0         | +0.0           | +0.0           | +0.0          | +0.0   | 39.2              | 54.0                  | -14.8 | Horiz  |
|    | M              |       | +0.0         | +0.0           | +0.0           | -15.1         |        |                   |                       |       |        |
|    | Ave            |       | +4.1         |                |                |               |        |                   | 10MHz 802             | 2.11a |        |
| ^  | 21098.000      | 61.7  | +0.0         | +0.0           | +0.0           | +0.0          | +0.0   | 50.7              | 24Mbps<br>54.0        | -3.3  | Horiz  |
|    | 21098.000<br>M | 01.7  | +0.0 +0.0    | +0.0 +0.0      | +0.0 +0.0      | +0.0<br>-15.1 | +0.0   | 50.7              | 54.0                  | -3.3  | 110112 |
|    | 111            |       | +4.1         | . 0.0          | 10.0           | 13.1          |        |                   | 10MHz 802             | 2.11a |        |
|    |                |       |              |                |                |               |        |                   | 24Mbps                |       |        |
| 17 | 15975.000      | 41.5  | +0.0         | +39.7          | +2.8           | +8.6          | +0.0   | 39.1              | 54.0                  | -14.9 | Vert   |
|    | M              |       | +2.8         | -57.4          | +1.1           | +0.0          |        |                   |                       |       |        |
|    | Ave            |       | +0.0         |                |                |               |        |                   | 10MHz-802             |       |        |
|    |                |       |              |                |                |               |        |                   | 13MCSHT               | 202S  |        |

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| ^ 15975.000       | 53.2         | +0.0           | +39.7          | +2.8   | +8.6           | +0.0 | 50.8  | 54.0                    | -3.2  | Vert   |
|-------------------|--------------|----------------|----------------|--------|----------------|------|-------|-------------------------|-------|--------|
| M                 |              | +2.8           | -57.4          | +1.1   | +0.0           |      |       | 101/11 002              | 11    |        |
|                   |              | +0.0           |                |        |                |      |       | 10MHz-802.<br>13MCSHT20 |       |        |
| 19 15824.100      | 41.1         | +0.0           | +40.1          | +2.8   | +8.5           | +0.0 | 39.0  | 54.0                    | -15.0 | Horiz  |
| M                 | 71.1         | +2.9           | -57.4          | +1.0   | +0.0           | 10.0 | 37.0  | 54.0                    | -13.0 | HOHZ   |
| Ave               |              | +0.0           | 57.1           | 11.0   | 10.0           |      |       | 10MHz-802.              | .11n  |        |
|                   |              |                |                |        |                |      |       | 13MCSHT2                |       |        |
| ^ 15824.100       | 54.1         | +0.0           | +40.1          | +2.8   | +8.5           | +0.0 | 52.0  | 54.0                    | -2.0  | Horiz  |
| M                 |              | +2.9           | -57.4          | +1.0   | +0.0           |      |       |                         |       |        |
|                   |              | +0.0           |                |        |                |      |       | 10MHz-802.              |       |        |
|                   |              |                |                |        |                |      |       | 13MCSHT2                |       |        |
| 21 10560.000      | 47.8         | +0.0           | +39.3          | +2.3   | +6.7           | +0.0 | 38.9  | 54.0                    | -15.1 | Vert   |
| M                 |              | +2.1           | -59.3          | +0.0   | +0.0           |      |       | 201 577 002             |       |        |
|                   |              | +0.0           |                |        |                |      |       | 20MHz 802-              | ·11a  |        |
| 22 15000 500      | 41.2         | .00            | +20.0          | 12.0   | .0.6           | .00  | 29.0  | 9Mbps                   | 15 1  | Mont   |
| 22 15900.500<br>M | 41.2         | $+0.0 \\ +2.9$ | +39.9          | +2.8   | $+8.6 \\ +0.0$ | +0.0 | 38.9  | 54.0                    | -15.1 | Vert   |
| Ave               |              | +0.0           | -57.5          | +1.0   | +0.0           |      |       | 10MHz-802.              | 11n   |        |
| Ave               |              | +0.0           |                |        |                |      |       | 13MCSHT2                |       |        |
| ^ 15900.500       | 54.7         | +0.0           | +39.9          | +2.8   | +8.6           | +0.0 | 52.4  | 54.0                    | -1.6  | Vert   |
| M                 | 5 117        | +2.9           | -57.5          | +1.0   | +0.0           | 10.0 | 32.1  | 21.0                    | 1.0   | , 611  |
|                   |              | +0.0           |                |        |                |      |       | 10MHz-802.              | .11n  |        |
|                   |              |                |                |        |                |      |       | 13MCSHT20               | 02S   |        |
| 24 15898.100      | 41.1         | +0.0           | +39.9          | +2.8   | +8.6           | +0.0 | 38.8  | 54.0                    | -15.2 | Horiz  |
| M                 |              | +2.9           | -57.5          | +1.0   | +0.0           |      |       |                         |       |        |
| Ave               |              | +0.0           |                |        |                |      |       | 10MHz-802.              |       |        |
|                   |              |                |                |        |                |      |       | 13MCSHT2                |       |        |
| ^ 15898.100       | 54.2         | +0.0           | +39.9          | +2.8   | +8.6           | +0.0 | 51.9  | 54.0                    | -2.1  | Horiz  |
| M                 |              | +2.9           | -57.5          | +1.0   | +0.0           |      |       | 103/11 002              | 1.1   |        |
|                   |              | +0.0           |                |        |                |      |       | 10MHz-802.              |       |        |
| 26 15960.000      | 41.1         | +0.0           | +39.7          | +2.8   | +8.6           | +0.0 | 38.7  | 13MCSHT20<br>54.0       | -15.3 | Horiz  |
| 20 13900.000<br>M | 41.1         | +2.8           | +39.7<br>-57.4 | +2.8   | +0.0           | +0.0 | 36.7  | 34.0                    | -13.3 | попи   |
| Ave               |              | +0.0           | -37.4          | ⊤1.1   | +0.0           |      |       | 20MHz 802-              | .11h- |        |
| 1110              |              | 10.0           |                |        |                |      |       | 6.5MCSHT2               |       |        |
| ^ 15960.000       | 53.9         | +0.0           | +39.7          | +2.8   | +8.6           | +0.0 | 51.5  | 54.0                    | -2.5  | Horiz  |
| M                 |              |                | -57.4          | +1.1   | +0.0           |      | 2 2.0 | 2                       |       |        |
|                   |              | +0.0           |                |        |                |      |       | 20MHz 802-              | 11b-  |        |
|                   |              |                |                |        |                |      |       | 6.5MCSHT2               |       |        |
| 28 15840.000      | 40.7         | +0.0           | +40.1          | +2.8   | +8.5           | +0.0 | 38.5  | 54.0                    | -15.5 | Vert   |
| M                 |              | +2.9           | -57.5          | +1.0   | +0.0           |      |       |                         |       |        |
| Ave               |              | +0.0           |                |        |                |      |       | 20MHz 802-              |       |        |
| A 15040.000       | <i>711</i>   | .0.0           | . 40.1         | . 2. 0 | .0.5           | .0.0 | F1.0  | 6.5MCSHT2               |       | 7.7    |
| ^ 15840.000       | 54.1         | +0.0           | +40.1          | +2.8   | +8.5           | +0.0 | 51.9  | 54.0                    | -2.1  | Vert   |
| M                 |              | +2.9<br>+0.0   | -57.5          | +1.0   | +0.0           |      |       | 20MHz 802-              | 11h   |        |
|                   |              | +0.0           |                |        |                |      |       | 6.5MCSHT2               |       |        |
| 30 15974.600      | 40.7         | +0.0           | +39.7          | +2.8   | +8.6           | +0.0 | 38.3  | 54.0                    | -15.7 | Horiz  |
| M                 | <b>→</b> ∪./ | +2.8           | +39.7<br>-57.4 | +2.8   | +0.0           | 10.0 | 50.5  | 54.0                    | -13.7 | 110112 |
| Ave               |              | +0.0           | 57.1           |        | . 3.0          |      |       | 10MHz                   |       |        |
|                   |              |                |                |        |                |      |       | 802.11a_24N             | Mbps  |        |
| 1                 |              |                |                |        |                |      |       |                         |       |        |

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| 31 | 15900.000      | 40.4         | +0.0           | +39.9          | +2.8         | +8.6         | +0.0 | 38.1 | 54.0               | -15.9         | Horiz    |
|----|----------------|--------------|----------------|----------------|--------------|--------------|------|------|--------------------|---------------|----------|
| 31 | M              | 40.4         | +2.9           | -57.5          | +1.0         | +0.0         | +0.0 | 30.1 | 34.0               | -13.9         | 110112   |
|    | Ave            |              | +0.0           | - ,            |              |              |      |      | 20MHz 802          | 2-11a         |          |
|    |                |              |                |                |              |              |      |      | 9Mbps              |               |          |
| ^  | 15900.000      | 53.8         | +0.0           | +39.9          | +2.8         | +8.6         | +0.0 | 51.5 | 54.0               | -2.5          | Horiz    |
|    | M              |              | +2.9           | -57.5          | +1.0         | +0.0         |      |      |                    |               |          |
|    |                |              | +0.0           |                |              |              |      |      | 20MHz 802          | 2-11a         |          |
| 33 | 10600.700      | 46.6         | +0.0           | +39.3          | +2.3         | +6.7         | +0.0 | 37.9 | 9Mbps<br>54.0      | -16.1         | Horiz    |
| 33 | M              | 40.0         | +2.1           | -59.1          | +0.0         | +0.7         | +0.0 | 31.9 | 34.0               | -10.1         | HOHZ     |
|    | Ave            |              | +0.0           | 57.1           | 10.0         | 10.0         |      |      | 10MHz              |               |          |
|    |                |              |                |                |              |              |      |      | 802.11a_24         | 4Mbps         |          |
| ^  | 10000.700      | 58.9         | +0.0           | +39.3          | +2.3         | +6.7         | +0.0 | 50.2 | 54.0               | -3.8          | Horiz    |
|    | M              |              | +2.1           | -59.1          | +0.0         | +0.0         |      |      |                    |               |          |
|    |                |              | +0.0           |                |              |              |      |      | 10MHz              | () /()        |          |
| 35 | 15974.600      | 40.3         | +0.0           | +39.7          | +2.8         | +8.6         | +0.0 | 37.9 | 802.11a_24<br>54.0 | -16.1         | Horiz    |
|    | 13974.000<br>M | +0.3         | +2.8           | +39.7<br>-57.4 | +2.8         | +0.0         | 10.0 | 31.7 | J+.U               | -10.1         | 1 101 1Z |
|    | Ave            |              | +0.0           | 37.1           |              | 10.0         |      |      | 10MHz-80           | 2.11n         |          |
|    |                |              |                |                |              |              |      |      | 13MCSHT            | 202S          |          |
| ^  | 15974.600      | 54.1         | +0.0           | +39.7          | +2.8         | +8.6         | +0.0 | 51.7 | 54.0               | -2.3          | Horiz    |
|    | M              |              | +2.8           | -57.4          | +1.1         | +0.0         |      |      |                    |               |          |
|    |                |              | +0.0           |                |              |              |      |      | 10MHz              | () /()        |          |
|    | 15974.600      | 52.7         | +0.0           | +39.7          | +2.8         | +8.6         | +0.0 | 50.3 | 802.11a_24<br>54.0 | -3.7          | Horiz    |
|    | 13974.000<br>M | 32.1         | $+0.0 \\ +2.8$ | +39.7<br>-57.4 | +2.8<br>+1.1 | +0.0         | +0.0 | 30.3 | 34.0               | -3.7          | HOLIZ    |
|    | 171            |              | +0.0           | 37.1           | 1 1.1        | 10.0         |      |      | 10MHz-80           | 2.11n         |          |
|    |                |              |                |                |              |              |      |      | 13MCSHT            |               |          |
| 38 | 10649.600      | 45.3         | +0.0           | +39.3          | +2.3         | +6.7         | +0.0 | 37.1 | 54.0               | -16.9         | Vert     |
|    | M              |              | +2.1           | -58.6          | +0.0         | +0.0         |      |      |                    |               |          |
|    | Ave            |              | +0.0           |                |              |              |      |      | 10MHz              | (3.41         |          |
|    | 10649.600      | 57.5         | +0.0           | +39.3          | +2.3         | +6.7         | +0.0 | 49.3 | 802.11a_24<br>54.0 | +Mbps<br>-4.7 | Vert     |
|    | 10049.000<br>M | 37.3         | +2.1           | +39.3<br>-58.6 | +2.3         | +0.7         | +0.0 | 49.3 | 34.0               | -4./          | vert     |
|    | 171            |              | +0.0           | 50.0           | 10.0         | 10.0         |      |      | 10MHz              |               |          |
|    |                |              |                |                |              |              |      |      | 802.11a_24         | 4Mbps         |          |
| 40 | 10640.000      | 45.2         | +0.0           | +39.3          | +2.3         | +6.7         | +0.0 | 36.9 | 54.0               | -17.1         | Vert     |
|    | M              |              | +2.1           | -58.7          | +0.0         | +0.0         |      |      |                    |               |          |
|    | Ave            |              | +0.0           |                |              |              |      |      | 20MHz 802          |               |          |
| ^  | 10640.000      | 50.2         | +0.0           | 120.2          | 12.2         | 167          | +0.0 | 51.0 | 6.5MCSHT           |               | Vert     |
|    | 10640.000<br>M | 59.3         | +0.0 $+2.1$    | +39.3<br>-58.7 | +2.3<br>+0.0 | +6.7<br>+0.0 | +0.0 | 51.0 | 54.0               | -3.0          | vert     |
|    | 141            |              | +0.0           | 50.7           | 10.0         | 10.0         |      |      | 20MHz 802          | 2-11b-        |          |
|    |                |              | . 3.0          |                |              |              |      |      | 6.5MCSHT           |               |          |
| 42 | 10640.000      | 45.1         | +0.0           | +39.3          | +2.3         | +6.7         | +0.0 | 36.8 | 54.0               | -17.2         | Horiz    |
|    | M              |              | +2.1           | -58.7          | +0.0         | +0.0         |      |      |                    |               |          |
|    | Ave            |              | +0.0           |                |              |              |      |      | 20MHz 802          |               |          |
|    | 10640 000      | <b>5</b> 0.6 | .00            | 120.2          | .2.2         |              | .0.0 | 50.2 | 6.5MCSHT           |               | II.      |
| ^  | 10640.000<br>M | 58.6         | +0.0 $+2.1$    | +39.3<br>-58.7 | +2.3<br>+0.0 | +6.7<br>+0.0 | +0.0 | 50.3 | 54.0               | -3.7          | Horiz    |
|    | 1 <b>V1</b>    |              | +2.1<br>+0.0   | -30.1          | +0.0         | +0.0         |      |      | 20MHz 802          | 2-11b-        |          |
|    |                |              | . 0.0          |                |              |              |      |      | 6.5MCSHT           |               |          |
|    |                |              |                |                |              |              |      |      | 6.5MCSHT           | 1201S         |          |

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| 44 10650.000      | 45.0  | +0.0         | +39.3          | +2.3           | +6.7         | +0.0   | 36.8 | 54.0                | -17.2  | Vert   |
|-------------------|-------|--------------|----------------|----------------|--------------|--------|------|---------------------|--------|--------|
| M                 |       | +2.1<br>+0.0 | -58.6          | +0.0           | +0.0         |        |      | 101/11- 90          | 0.11.  |        |
| Ave               |       | +0.0         |                |                |              |        |      | 10MHz-80<br>13MCSHT |        |        |
| ^ 10650.000       | 59.5  | +0.0         | +39.3          | +2.3           | +6.7         | +0.0   | 51.3 | 54.0                | -2.7   | Vert   |
| M                 | 39.3  | +2.1         | -58.6          | +0.0           | +0.7         | +0.0   | 31.3 | 34.0                | -2.1   | VCIT   |
| 171               |       | +0.0         | 30.0           | 10.0           | 10.0         |        |      | 10MHz-80            | 2.11n  |        |
|                   |       |              |                |                |              |        |      | 13MCSHT             |        |        |
| 46 10638.700      | 44.8  | +0.0         | +39.3          | +2.3           | +6.7         | +0.0   | 36.5 | 54.0                | -17.5  | Vert   |
| M                 |       | +2.1         | -58.7          | +0.0           | +0.0         |        |      |                     |        |        |
| Ave               |       | +0.0         |                |                |              |        |      | 20MHz 80            | 2-11a  |        |
|                   |       |              |                |                |              |        |      | 9Mbps               |        |        |
| ^ 10638.700       | 57.3  | +0.0         | +39.3          | +2.3           | +6.7         | +0.0   | 49.0 | 54.0                | -5.0   | Vert   |
| M                 |       | +2.1         | -58.7          | +0.0           | +0.0         |        |      | 20144 00            |        |        |
|                   |       | +0.0         |                |                |              |        |      | 20MHz 80            | 2-11a  |        |
| 40 10600 000      | 45 1  | .00          | . 20. 2        | .2.2           | 7            | . 0. 0 | 26.4 | 9Mbps               | 17.6   | TT     |
| 48 10600.000<br>M | 45.1  | +0.0 $+2.1$  | +39.3<br>-59.1 | $+2.3 \\ +0.0$ | +6.7<br>+0.0 | +0.0   | 36.4 | 54.0                | -17.6  | Horiz  |
| Ave               |       | +2.1<br>+0.0 | -39.1          | +0.0           | +0.0         |        |      | 20MHz 80            | 2 110  |        |
| Ave               |       | +0.0         |                |                |              |        |      | 9Mbps               | 2-11a  |        |
| 49 10600.000      | 44.9  | +0.0         | +39.3          | +2.3           | +6.7         | +0.0   | 36.2 | 54.0                | -17.8  | Horiz  |
| 4) 10000.000<br>M | 77.7  | +2.1         | -59.1          | +0.0           | +0.0         | 10.0   | 30.2 | 34.0                | 17.0   | HOHZ   |
| Ave               |       | +0.0         | 0,,1           |                | . 0.0        |        |      | 20MHz 80            | 2-11b- |        |
|                   |       |              |                |                |              |        |      | 6.5MCSH             |        |        |
| ^ 10600.000       | 59.3  | +0.0         | +39.3          | +2.3           | +6.7         | +0.0   | 50.6 | 54.0                | -3.4   | Horiz  |
| M                 |       | +2.1         | -59.1          | +0.0           | +0.0         |        |      |                     |        |        |
|                   |       | +0.0         |                |                |              |        |      | 20MHz 80            |        |        |
|                   |       |              |                |                |              |        |      | 6.5MCSH             |        |        |
| ^ 10600.000       | 58.2  | +0.0         | +39.3          | +2.3           | +6.7         | +0.0   | 49.5 | 54.0                | -4.5   | Horiz  |
| M                 |       | +2.1         | -59.1          | +0.0           | +0.0         |        |      | 20141 00            | 2 11   |        |
|                   |       | +0.0         |                |                |              |        |      | 20MHz 80            | 2-11a  |        |
| 52 15823.100      | 38.0  | +0.0         | +40.1          | +2.8           | +8.5         | +0.0   | 35.9 | 9Mbps<br>54.0       | -18.1  | Horiz  |
| 32 13823.100<br>M | 36.0  | +0.0<br>+2.9 | +40.1<br>-57.4 | +2.8<br>+1.0   | +0.0         | +0.0   | 33.9 | 34.0                | -16.1  | HOHZ   |
| Ave               |       | +0.0         | -37.4          | +1.0           | +0.0         |        |      | 10MHz               |        |        |
| Tive              |       | 10.0         |                |                |              |        |      | 802.11a_24          | 4Mbps  |        |
| ^ 15823.100       | 50.6  | +0.0         | +40.1          | +2.8           | +8.5         | +0.0   | 48.5 | 54.0                | -5.5   | Horiz  |
| M                 | 20.0  | +2.9         | -57.4          | +1.0           | +0.0         |        |      | 2                   | 0.0    | 110112 |
|                   |       | +0.0         |                |                |              |        |      | 10MHz               |        |        |
|                   |       |              |                |                |              |        |      | 802.11a_24          | 4Mbps  |        |
| 54 10596.800      | 44.5  | +0.0         | +39.3          | +2.3           | +6.7         | +0.0   | 35.7 | 54.0                | -18.3  | Horiz  |
| M                 |       | +2.1         | -59.2          | +0.0           | +0.0         |        |      |                     |        |        |
| Ave               |       | +0.0         |                |                |              |        |      | 10MHz-80            |        |        |
|                   |       |              |                |                |              |        |      | 13MCSHT             |        |        |
| ^ 10596.800       | 57.2  | +0.0         | +39.3          | +2.3           | +6.7         | +0.0   | 48.4 | 54.0                | -5.6   | Horiz  |
| M                 |       | +2.1         | -59.2          | +0.0           | +0.0         |        |      | 101/11 00           | 0.11.  |        |
|                   |       | +0.0         |                |                |              |        |      | 10MHz-80            |        |        |
| 56 10600.000      | 4.4.1 | +0.0         | 120.2          | 12.2           | 167          | +0.0   | 25 / | 13MCSHT             |        | Vant   |
| 56 10600.000<br>M | 44.1  | +0.0 +2.1    | +39.3<br>-59.1 | $+2.3 \\ +0.0$ | +6.7<br>+0.0 | +0.0   | 35.4 | 54.0                | -18.6  | Vert   |
| Ave               |       | +2.1         | -39.1          | +0.0           | +0.0         |        |      | 10MHz               |        |        |
| 1100              |       | 10.0         |                |                |              |        |      | 802.11a_24          | 4Mbps  |        |
|                   |       |              |                |                |              |        |      | 502.11a_2           | intops |        |

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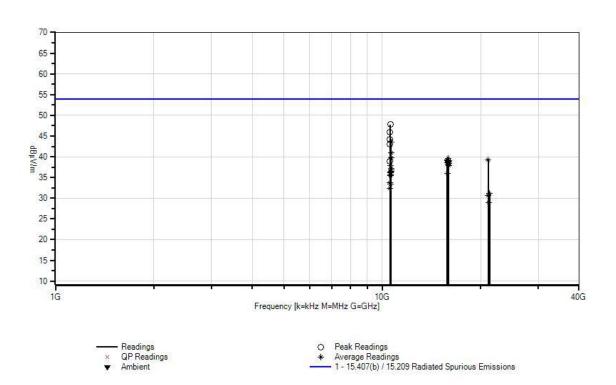
| -  |                       |       |                              |                |           |               |      |      |                           |                           |             |
|----|-----------------------|-------|------------------------------|----------------|-----------|---------------|------|------|---------------------------|---------------------------|-------------|
| ٨  | 10600.000             | 57.2  | +0.0                         | +39.3          | +2.3      | +6.7          | +0.0 | 48.5 | 54.0                      | -5.5                      | Vert        |
|    | M                     |       | +2.1                         | -59.1          | +0.0      | +0.0          |      |      |                           |                           |             |
|    |                       |       | +0.0                         |                |           |               |      |      | 10MHz                     |                           |             |
|    |                       |       |                              |                |           |               |      |      | 802.11a_24                | 4Mbps                     |             |
| ٨  | 10600.000             | 54.1  | +0.0                         | +39.3          | +2.3      | +6.7          | +0.0 | 45.4 | 54.0                      | -8.6                      | Vert        |
|    | M                     |       | +2.1                         | -59.1          | +0.0      | +0.0          |      |      |                           |                           |             |
|    |                       |       | +0.0                         |                |           |               |      |      | 20MHz 802                 | 2-11a                     |             |
|    |                       |       |                              |                |           |               |      |      | 9Mbps                     |                           |             |
| 59 | 10549.500             | 42.6  | +0.0                         | +39.3          | +2.3      | +6.7          | +0.0 | 33.8 | 54.0                      | -20.2                     | Horiz       |
|    | M                     | 12.0  | +2.1                         | -59.2          | +0.0      | +0.0          | 10.0 | 55.0 | 2                         | 20.2                      | TIOTIE      |
|    | Ave                   |       | +0.0                         | 37.2           | 10.0      | 10.0          |      |      | 10MHz                     |                           |             |
|    | 1110                  |       | 10.0                         |                |           |               |      |      | 802.11a_24                | 1Mhns                     |             |
| ^  | 10549.500             | 54.5  | +0.0                         | +39.3          | +2.3      | +6.7          | +0.0 | 45.7 | 54.0                      | -8.3                      | Horiz       |
|    | M                     | 54.5  | +0.0                         | +39.3<br>-59.2 | +0.0      | +0.7          | +0.0 | 43.7 | 34.0                      | -0.5                      | HOHZ        |
|    | IVI                   |       | +0.0                         | -39.2          | +0.0      | +0.0          |      |      | 10MHz                     |                           |             |
|    |                       |       | +0.0                         |                |           |               |      |      |                           | Δ. Z1                     |             |
| 1  | 10540 400             | 10.5  | 0.0                          | 20.2           | 2.2       |               | 0.0  | 22.7 | 802.11a_24                |                           | ** '        |
| 61 | 10549.400             | 42.5  | +0.0                         | +39.3          | +2.3      | +6.7          | +0.0 | 33.7 | 54.0                      | -20.3                     | Horiz       |
|    | M                     |       | +2.1                         | -59.2          | +0.0      | +0.0          |      |      |                           |                           |             |
|    | Ave                   |       | +0.0                         |                |           |               |      |      | 10MHz-802                 |                           |             |
|    |                       |       |                              |                |           |               |      |      | 13MCSHT                   | 202S                      |             |
| ٨  | 10549.400             | 56.6  | +0.0                         | +39.3          | +2.3      | +6.7          | +0.0 | 47.8 | 54.0                      | -6.2                      | Horiz       |
|    | M                     |       | +2.1                         | -59.2          | +0.0      | +0.0          |      |      |                           |                           |             |
|    |                       |       | +0.0                         |                |           |               |      |      | 10MHz-802                 | 2.11n                     |             |
|    |                       |       |                              |                |           |               |      |      | 13MCSHT                   | 202S                      |             |
| 63 | 10600.500             | 42.1  | +0.0                         | +39.3          | +2.3      | +6.7          | +0.0 | 33.4 | 54.0                      | -20.6                     | Vert        |
|    | M                     |       | +2.1                         | -59.1          | +0.0      | +0.0          |      |      |                           |                           |             |
|    | Ave                   |       | +0.0                         |                |           |               |      |      | 10MHz-802                 | 2.11n                     |             |
|    |                       |       |                              |                |           |               |      |      | 13MCSHT                   |                           |             |
| ٨  | 10600.500             | 57.4  | +0.0                         | +39.3          | +2.3      | +6.7          | +0.0 | 48.7 | 54.0                      | -5.3                      | Vert        |
|    | M                     |       | +2.1                         | -59.1          | +0.0      | +0.0          |      |      |                           |                           |             |
|    | 1.1                   |       | +0.0                         | 07.1           |           | . 0.0         |      |      | 10MHz-802                 | 2.11n                     |             |
|    |                       |       | 10.0                         |                |           |               |      |      | 13MCSHT                   |                           |             |
| 65 | 10548.250             | 41.1  | +0.0                         | +39.3          | +2.3      | +6.7          | +0.0 | 32.3 | 54.0                      | -21.7                     | Vert        |
| 03 | M                     | 71.1  | +2.1                         | -59.2          | +0.0      | +0.0          | 10.0 | 32.3 | 34.0                      | -21.7                     | VCIT        |
|    | Ave                   |       | +0.0                         | -39.2          | +0.0      | +0.0          |      |      | 10MHz                     |                           |             |
|    | Avc                   |       | +0.0                         |                |           |               |      |      | 802.11a_24                | 1Mhnc                     |             |
| ^  | 10549.250             | 5 A A | .00                          | . 20. 2        | +2.2      | 7             | .00  | 15.0 |                           | _                         | <b>X</b> /4 |
| ^  | 10548.250             | 54.4  | +0.0                         | +39.3          | +2.3      | +6.7          | +0.0 | 45.6 | 54.0                      | -8.4                      | Vert        |
|    | M                     |       | +2.1                         | -59.2          | +0.0      | +0.0          |      |      | 101/411                   |                           |             |
|    | 111                   |       | 0.0                          |                |           |               |      |      | 10MHz                     |                           |             |
|    | 111                   |       | +0.0                         |                |           |               |      |      | 0000 11 -                 | 43.71                     |             |
|    |                       |       |                              |                |           |               |      |      | 802.11a_24                |                           |             |
| 67 | 21300.000             | 42.4  | +0.0                         | +0.0           | +0.0      | +0.0          | +0.0 | 31.2 | 802.11a_24<br>54.0        | 4Mbps<br>-22.8            | Horiz       |
| 67 |                       | 42.4  | +0.0<br>+0.0                 | +0.0<br>+0.0   | +0.0 +0.0 | +0.0<br>-15.4 | +0.0 | 31.2 | 54.0                      | -22.8                     | Horiz       |
|    | 21300.000             | 42.4  | +0.0                         |                |           |               | +0.0 | 31.2 | 54.0<br>10MHz 802         | -22.8                     | Horiz       |
|    | 21300.000<br>M        | 42.4  | +0.0<br>+0.0                 |                |           |               | +0.0 | 31.2 | 54.0                      | -22.8                     | Horiz       |
|    | 21300.000<br>M        | 42.4  | +0.0<br>+0.0                 |                |           |               | +0.0 | 31.2 | 54.0<br>10MHz 802         | -22.8                     | Horiz       |
|    | 21300.000<br>M<br>Ave |       | +0.0<br>+0.0<br>+4.2         | +0.0           | +0.0      | -15.4         |      |      | 54.0<br>10MHz 802<br>Mbps | -22.8<br>2.11a 24         |             |
|    | 21300.000<br>M<br>Ave |       | +0.0<br>+0.0<br>+4.2<br>+0.0 | +0.0           | +0.0      | +0.0          |      |      | 54.0<br>10MHz 802<br>Mbps | -22.8<br>2.11a 24<br>-9.9 |             |

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| 69 21098.000 | 41.7 | +0.0 | +0.0 | +0.0 | +0.0  | +0.0 | 30.7 | 54.0      | -23.3 | Vert  |
|--------------|------|------|------|------|-------|------|------|-----------|-------|-------|
| M            |      | +0.0 | +0.0 | +0.0 | -15.1 |      |      |           |       |       |
| Ave          |      | +4.1 |      |      |       |      |      | 10MHz 802 | 2.11a |       |
|              |      |      |      |      |       |      |      | 24Mbps    |       |       |
| ^ 21098.000  | 54.1 | +0.0 | +0.0 | +0.0 | +0.0  | +0.0 | 43.1 | 54.0      | -10.9 | Vert  |
| M            |      | +0.0 | +0.0 | +0.0 | -15.1 |      |      |           |       |       |
|              |      | +4.1 |      |      |       |      |      | 10MHz 802 | 2.11a |       |
|              |      |      |      |      |       |      |      | 24Mbps    |       |       |
| 71 21200.000 | 40.0 | +0.0 | +0.0 | +0.0 | +0.0  | +0.0 | 28.9 | 54.0      | -25.1 | Horiz |
| M            |      | +0.0 | +0.0 | +0.0 | -15.3 |      |      |           |       |       |
| Ave          |      | +4.2 |      |      |       |      |      | 10MHz 802 | 2.11a |       |
|              |      |      |      |      |       |      |      | 24Mbps    |       |       |
| ^ 21200.000  | 52.7 | +0.0 | +0.0 | +0.0 | +0.0  | +0.0 | 41.6 | 54.0      | -12.4 | Horiz |
| M            |      | +0.0 | +0.0 | +0.0 | -15.3 |      |      |           |       |       |
|              |      | +4.2 |      |      |       |      |      | 10MHz 802 | 2.11a |       |
|              |      |      |      |      |       |      |      | 24Mbps    |       |       |

CKC Laboratories, Inc. Date: 6/1/2012 Time: 10:46:49 Digital Path WO#: 92682 15.407(b) / 15.209 Radiated Spurious Emissions Test Distance: 3 Meters Sequence#: 206 Vert UNII Bands. 20MHz Channel width.





Customer: **Digital Path** 

Specification: 15.407(b) / 15.209 Radiated Spurious Emissions

Work Order #:92682Date:6/1/2012Test Type:Radiated ScanTime:16:30:00Equipment:5GHz Panel (18dBi) + Omni (11dBi)Sequence#:207Manufacturer:Digital PathTested By:E. Wong

Model: G5RL10G S/N: EMI 2

#### Test Equipment:

| Test Equi | pincente |                   |                 |                  |              |
|-----------|----------|-------------------|-----------------|------------------|--------------|
| ID        | Asset #  | Description       | Model           | Calibration Date | Cal Due Date |
| T1        | AN02668  | Spectrum Analyzer | E4446A          | 2/23/2011        | 2/23/2013    |
| T2        | AN02157  | Horn Antenna-ANSI | 3115            | 1/17/2011        | 1/17/2013    |
|           |          | C63.5             |                 |                  |              |
| T3        | AN03302  | Cable             | 32026-29094K-   | 3/21/2012        | 3/21/2014    |
|           |          |                   | 29094K-72TC     |                  |              |
| T4        | ANP01210 | Cable             | FSJ1P-50A-4A    | 3/15/2011        | 3/15/2013    |
| T5        | ANP05913 | Cable             | 32022-29094K-   | 8/30/2011        | 8/30/2013    |
|           |          |                   | 65TC            |                  |              |
| T6        | AN03114  | Preamp            | AMF-7D-         | 5/13/2011        | 5/13/2013    |
|           |          |                   | 00101800-30-10P |                  |              |
|           | ANP05935 | Attenuator        | 84A-10          | 10/19/2011       | 10/19/2013   |
|           | ANP01211 | Attenuator        | 23-10-34        | 4/15/2011        | 4/15/2013    |
| T7        | AN01417  | High Pass Filter  | 84300-80039     | 2/9/2012         | 2/9/2014     |
| T8        | AN02694  | Active Horn       | AMFW-5F-        | 11/10/2010       | 11/10/2012   |
|           |          | Antenna-ANSI      | 18002650-20-10P |                  |              |
|           |          | C63.5 Antenna     |                 |                  |              |
|           |          | Factors (dB)      |                 |                  |              |
|           | AN02695  | Active Horn       | AMFW-5F-        | 11/10/2010       | 11/10/2012   |
|           |          | Antenna-ANSI      | 260400-33-8P    |                  |              |
|           |          | C63.5 Antenna     |                 |                  |              |
|           |          | Factors (dB)      |                 |                  |              |
| T9        | ANP05911 | Cable             | 32022-29094K-   | 8/30/2011        | 8/30/2013    |
|           |          |                   | 65TC            |                  |              |
|           | AN00432  | Loop Antenna      | 6502            | 3/31/2011        | 3/31/2013    |
|           | AN00730  | Preamp            |                 | 1/31/2011        | 1/31/2013    |
|           | AN00852  | Biconilog Antenna | CBL 6111C       | 11/16/2010       | 11/16/2012   |
|           | ANP05299 | Cable             | RG214           | 3/6/2011         | 3/6/2013     |
|           | ANP05300 | Cable             | RG214/U         | 3/7/2011         | 3/7/2013     |
|           | ANP05440 | Cable             |                 | 3/7/2011         | 3/7/2013     |

# Equipment Under Test (\* = EUT):

| Equipment Citate Test ( | 201).        |         |       |  |
|-------------------------|--------------|---------|-------|--|
| Function                | Manufacturer | Model # | S/N   |  |
| 5GHz Panel (18dBi) +    | Digital Path | G5RL10G | EMI 2 |  |
| Omni (11dBi)*           |              |         |       |  |

# Support Devices:

| Function            | Manufacturer | Model #       | S/N             |
|---------------------|--------------|---------------|-----------------|
| Laptop Computer     | HP           | ProBook 6565b | 5CB13637ZF      |
| Laptop Power Supply | HP           | 608428-002    | F12941126327228 |

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The EUT installed on a pole as intended. DC power port is connected to a DC power supply via a CAT5 cable. The Ethernet port is connected to a remote laptop via unshielded twisted pair.

The Remote laptop is running test software to exercise the intended functionalities. Receiver circuit is activated.

11dBi Omni antenna is connected to radio 0 (instance 1)

18 dBi panel antenna is connected to radio1 (instance 2)

This data sheet is for the EUT transmitting via 11dBi Omni antenna connected to radio 0 (instance 1)

Freq = 5470-5725MHz

5495MHz, 5590MHz, 5705MHz.

BW = 10 MHz

802.11a: 24Mbps, TX power setting= 17, 18.5, 18.5

802.11n: 13MCSHT20 2S,TX power setting= 17, 18.5, 17.5

Freq: 5500MHz, 5590MHz, 5700MHz.

BW = 20MHz

802.11a: 9 Mbps, TX power setting= 17, 19, 16.5

802.11n: 6.5MCS HT20 1S, TX power setting= 16.5, 19, 16.5

Temperature: 21.9°C, Relative Humidity: 38-43%, Atmospheric Pressure: 101.5kPa

Frequency range of measurement = 9kHz-40GHz.

9 kH -150 kHz; RBW=200 Hz, VBW=200 Hz;150 kHz-30 MHz; RBW=9 kHz, VBW=9 kHz;30 MHz-1000 MHz; RBW=120 kHz, VBW=120 kHz,1000 MHz-40,000 MHz; RBW=1 MHz, VBW=1 MHz.

Recorded emission level is below the EIRP limit of -27dBm/MHz (68.2dBuV/m @ 3 meter) IAW 789033 D01 General UNII Test Procedures V01r01

Ext Attn: 0 dB

| Meas | urement Data: | Re   | eading lis | ted by ma | ırgin. |       | Τe    | est Distance | e: 3 Meters |        |       |
|------|---------------|------|------------|-----------|--------|-------|-------|--------------|-------------|--------|-------|
| #    | Freq          | Rdng | T1         | T2        | T3     | T4    | Dist  | Corr         | Spec        | Margin | Polar |
|      |               |      | T5         | T6        | T7     | T8    |       |              |             |        |       |
|      |               |      | T9         |           |        |       |       |              |             |        |       |
|      | MHz           | dΒμV | dB         | dB        | dB     | dB    | Table | $dB\mu V/m$  | $dB\mu V/m$ | dB     | Ant   |
| 1    | 22820.000     | 64.3 | +0.0       | +0.0      | +0.0   | +0.0  | +0.0  | 52.1         | 54.0        | -1.9   | Horiz |
|      | M             |      | +0.0       | +0.0      | +0.0   | -16.5 |       |              |             |        |       |
|      | Ave           |      | +4.3       |           |        |       |       |              | 10MHz 80    | 2.11a  |       |
|      |               |      |            |           |        |       |       |              | 24Mbps      |        |       |
| 2    | 2 22820.000   | 63.6 | +0.0       | +0.0      | +0.0   | +0.0  | +0.0  | 51.4         | 54.0        | -2.6   | Horiz |
|      | M             |      | +0.0       | +0.0      | +0.0   | -16.5 |       |              |             |        |       |
|      | Ave           |      | +4.3       |           |        |       |       |              | 10MHz 80    | 2.11n  |       |
|      |               |      |            |           |        |       |       |              | 13MCSHT     | ~202S  |       |
| /    | 22820.000     | 77.5 | +0.0       | +0.0      | +0.0   | +0.0  | +0.0  | 65.3         | 54.0        | +11.3  | Horiz |
|      | M             |      | +0.0       | +0.0      | +0.0   | -16.5 |       |              |             |        |       |
|      |               |      | +4.3       |           |        |       |       |              | 10MHz 80    | 2.11a  |       |
|      |               |      |            |           |        |       |       |              | 24Mbps      |        |       |
| /    | 22820.000     | 76.3 | +0.0       | +0.0      | +0.0   | +0.0  | +0.0  | 64.1         | 54.0        | +10.1  | Horiz |
|      | M             |      | +0.0       | +0.0      | +0.0   | -16.5 |       |              |             |        |       |
|      |               |      | +4.3       |           |        |       |       |              | 10MHz 80    | 2.11n  |       |
|      |               |      |            |           |        |       |       |              | 13MCSHT     | ~202S  |       |

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| S 22800.000  |              |             |      |         |        |       |      |                     |            |         |       |
|--|--------------|-------------|------|---------|--------|-------|------|---------------------|------------|---------|-------|
| Ave  |              | 63.2        |      |         |        |       | +0.0 | 51.0                | 54.0       | -3.0    | Horiz |
| Color  |              |             |      | +0.0    | +0.0   | -16.5 |      |                     |            |         |       |
| Column   | Ave          |             | +4.3 |         |        |       |      |                     |            | 2.11a   |       |
| March   House   Hous |              |             |      |         |        |       |      |                     |            |         |       |
| Ave  |              | 62.9        |      |         |        |       | +0.0 | 50.7                | 54.0       | -3.3    | Horiz |
| A 22800.000  |              |             |      | +0.0    | +0.0   | -16.5 |      |                     |            |         |       |
| A 22800.000  | Ave          |             | +4.3 |         |        |       |      |                     |            |         |       |
| M         +0.0         +0.0         +0.0         -16.5         20MHz 802.11a         24Mbps           ^ 22800.000         72.8         +0.0         +0.0         +0.0         +0.0         +0.0         60.6         54.0         +6.6         Horiz           M         +0.0         +0.0         +0.0         -16.5         20MHz 802.11n         6.5MCSHT201S           9 11410.000         56.1         +0.0         +38.8         +2.3         +6.9         +0.0         49.2         54.0         -4.8         Horiz           Ave         +0.0         +0.0         +0.0         10MHz 24Mbps         10MHz 24Mbps           Ave         +0.0         +39.1         +2.3         +6.8         +0.0         48.4         54.0         -5.6         Horiz           Ave         +0.0         +39.1         +2.3         +6.8         +0.0         61.2         54.0         +7.2         Horiz           M         +2.2         -57.3         +0.0         +0.0         10MHz         13MCSHT202S           12 11398.000         55.3         +0.0         +38.8         +2.3         +6.9         +0.0         48.3         54.0         -5.7         Horiz           Ave  |              |             |      |         |        |       |      |                     |            |         |       |
| Color  |              | 74.5        |      |         |        |       | +0.0 | 62.3                | 54.0       | +8.3    | Horiz |
| A 22800.000  | M            |             |      | +0.0    | +0.0   | -16.5 |      |                     |            |         |       |
| A 22800.000  |              |             | +4.3 |         |        |       |      |                     |            | 2.11a   |       |
| M       +0.0       +0.0       +0.0       -16.5       20MHz 802.11n       6.5MCSHT201S         9 11410.000       56.1       +0.0       +38.8       +2.3       +6.9       +0.0       49.2       54.0       -4.8       Horiz         M       +2.2       -57.1       +0.0       +0.0       10MHz 24Mbps       10MHz 24Mbps         10 11180.000       55.3       +0.0       +39.1       +2.3       +6.8       +0.0       48.4       54.0       -5.6       Horiz         Ave       +0.0       +2.2       -57.3       +0.0       +0.0       10MHz       13MCSHT202S         ^ 11180.000       68.1       +0.0       +39.1       +2.3       +6.8       +0.0       61.2       54.0       +7.2       Horiz         M       +2.2       -57.3       +0.0       +0.0       10MHz       13MCSHT202S         12 11398.000       55.3       +0.0       +38.8       +2.3       +6.9       +0.0       48.3       54.0       -5.7       Horiz         Ave       +0.0       +2.2       -57.2       +0.0       +0.0       20MHz 802.11n       6.5MCSHT201S         14 11399.700       55.0       +0.0       +38.8       +2.3       +6.9  |              |             |      |         |        |       |      |                     |            |         |       |
| 14.3   20MHz 802.11n   6.5MCSHT201S  |              | 72.8        |      |         |        |       | +0.0 | 60.6                | 54.0       | +6.6    | Horiz |
| 9 11410.000 56.1 +0.0 +38.8 +2.3 +6.9 +0.0 49.2 54.0 -4.8 Horiz  M   | M            |             |      | +0.0    | +0.0   | -16.5 |      |                     |            |         |       |
| 9 11410.000  |              |             | +4.3 |         |        |       |      |                     |            |         |       |
| M Ave         +2.2 bigs         -57.1 bigs         +0.0 bigs         +0.0 bigs         10 II180.000 bigs         55.3 bigs         +0.0 bigs         +2.2 bigs         +2.3 bigs         +6.8 bigs         +0.0 bigs         48.4 bigs         54.0 bigs         -5.6 bigs         Horiz           Ave         +0.0 bigs         +0.0 bigs </td <td></td>  |              |             |      |         |        |       |      |                     |            |         |       |
| Ave  |              | 56.1        |      |         |        |       | +0.0 | 49.2                | 54.0       | -4.8    | Horiz |
| 10   11180.000   55.3   +0.0   +39.1   +2.3   +6.8   +0.0   48.4   54.0   -5.6   Horiz   M   +2.2   -57.3   +0.0   +0.0   Horiz   10MHz   13MCSHT202S     ^ 11180.000   68.1   +0.0   +39.1   +2.3   +6.8   +0.0   61.2   54.0   +7.2   Horiz   Hori | M            |             |      | -57.1   | +0.0   | +0.0  |      |                     |            |         |       |
| M       +2.2       -57.3       +0.0       +0.0       10MHz 13MCSHT202S         ^ 11180.000       68.1       +0.0       +39.1       +2.3       +6.8       +0.0       61.2       54.0       +7.2       Horiz         M       +2.2       -57.3       +0.0       +0.0       10MHz 13MCSHT202S       10MHz 13MCSHT202S         12 11398.000       55.3       +0.0       +38.8       +2.3       +6.9       +0.0       48.3       54.0       -5.7       Horiz         Ave       +0.0       +38.8       +2.3       +6.9       +0.0       61.0       54.0       +7.0       Horiz         M       +2.2       -57.2       +0.0       +0.0       61.0       54.0       +7.0       Horiz         M       +2.2       -57.2       +0.0       +0.0       61.0       54.0       +7.0       Horiz         M       +2.2       -57.2       +0.0       +0.0       20MHz 802.11n       6.5MCSHT201S         14 11399.700       55.0       +0.0       +38.8       +2.3       +6.9       +0.0       48.0       54.0       -6.0       Horiz         Ave       +0.0       +38.8       +2.3       +6.9       +0.0       48.0       54.0 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>_</td> <td></td>   |              |             |      |         |        |       |      |                     |            | _       |       |
| Ave  |              | 55.3        |      |         |        |       | +0.0 | 48.4                | 54.0       | -5.6    | Horiz |
| 13MCSHT202S   13MCSHT202S   10MHz   13MCSHT202S   10MHz   13MCSHT202S   10MHz   13MCSHT202S   10MHz   13MCSHT202S   10MHz   13MCSHT202S   12 11398.000   55.3  | M            |             |      | -57.3   | +0.0   | +0.0  |      |                     |            |         |       |
| ^ 11180.000 68.1   | Ave          |             | +0.0 |         |        |       |      |                     |            |         |       |
| M  |              |             |      |         |        |       |      |                     |            |         |       |
| +0.0   |              | 68.1        |      |         |        |       | +0.0 | 61.2                | 54.0       | +7.2    | Horiz |
| 13MCSHT202S   1398.000   55.3   +0.0   +38.8   +2.3   +6.9   +0.0   48.3   54.0   -5.7   Horiz   M   +2.2   -57.2   +0.0   +0.0   20MHz 802.11n   6.5MCSHT201S   | M            |             |      | -57.3   | +0.0   | +0.0  |      |                     |            |         |       |
| 12   11398.000   55.3   +0.0   +38.8   +2.3   +6.9   +0.0   48.3   54.0   -5.7   Horiz   M   +2.2   -57.2   +0.0   +0.0   20MHz 802.11n   6.5MCSHT201S   |              |             | +0.0 |         |        |       |      |                     |            |         |       |
| M  |              |             |      |         |        |       |      |                     |            |         |       |
| Ave  |              | 55.3        |      |         |        |       | +0.0 | 48.3                | 54.0       | -5.7    | Horiz |
| 11398.000  |              |             |      | -57.2   | +0.0   | +0.0  |      |                     |            |         |       |
| ^ 11398.000       68.0       +0.0       +38.8       +2.3       +6.9       +0.0       61.0       54.0       +7.0       Horiz         M       +2.2       -57.2       +0.0       +0.0       20MHz 802.11n       6.5MCSHT201S         14 11399.700       55.0       +0.0       +38.8       +2.3       +6.9       +0.0       48.0       54.0       -6.0       Horiz         Ave       +0.0       +2.2       -57.2       +0.0       +0.0       20MHz       6.5MCSHT201S         ^ 11399.700       67.6       +0.0       +38.8       +2.3       +6.9       +0.0       60.6       54.0       +6.6       Horiz         M       +2.2       -57.2       +0.0       +0.0       +0.0       20MHz       6.5MCSHT201S         16 22360.000       59.8       +0.0       +0.0       +0.0       +0.0       +0.0       47.9       54.0       -6.1       Horiz         Ave       +4.3       10MHz 802.11a       24Mbps         17 11184.200       54.4       +0.0       +39.1       +2.3       +6.8       +0.0       47.5       54.0       -6.5       Horiz         M       +2.2       -57.3       +0.0       +0.0       47.5 <t< td=""><td>Ave</td><td></td><td>+0.0</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>  | Ave          |             | +0.0 |         |        |       |      |                     |            |         |       |
| M  |              |             |      |         |        |       |      |                     |            |         |       |
| +0.0 |              | 68.0        |      |         |        |       | +0.0 | 61.0                | 54.0       | +7.0    | Horiz |
| 14   11399.700   55.0   +0.0   +38.8   +2.3   +6.9   +0.0   48.0   54.0   -6.0   Horiz     M   | M            |             |      | -57.2   | +0.0   | +0.0  |      |                     |            |         |       |
| 14 11399.700       55.0       +0.0       +38.8       +2.3       +6.9       +0.0       48.0       54.0       -6.0       Horiz         Ave       +0.0       +0.0       +0.0       +0.0       +0.0       20MHz       6.5MCSHT201S         ^ 11399.700       67.6       +0.0       +38.8       +2.3       +6.9       +0.0       60.6       54.0       +6.6       Horiz         M       +2.2       -57.2       +0.0       +0.0       20MHz       6.5MCSHT201S         16 22360.000       59.8       +0.0       +0.0       +0.0       +0.0       +0.0       47.9       54.0       -6.1       Horiz         Ave       +4.3       10MHz 802.11a       24Mbps         17 11184.200       54.4       +0.0       +39.1       +2.3       +6.8       +0.0       47.5       54.0       -6.5       Horiz         M       +2.2       -57.3       +0.0       +0.0       20MHz       20MHz   |              |             | +0.0 |         |        |       |      |                     |            |         |       |
| M       +2.2       -57.2       +0.0       +0.0         Ave       +0.0       +0.0       +0.0       +0.0       20MHz       6.5MCSHT201S         ^ 11399,700       67.6       +0.0       +38.8       +2.3       +6.9       +0.0       60.6       54.0       +6.6       Horiz         M       +2.2       -57.2       +0.0       +0.0       20MHz       6.5MCSHT201S         16 22360,000       59.8       +0.0       +0.0       +0.0       +0.0       47.9       54.0       -6.1       Horiz         Ave       +4.3       10MHz 802.11a       24Mbps         17 11184,200       54.4       +0.0       +39.1       +2.3       +6.8       +0.0       47.5       54.0       -6.5       Horiz         M       +2.2       -57.3       +0.0       +0.0       20MHz   | 44 44200 700 | <b></b>     | 6.0  | 20.0    |        |       | 0.0  | 40.0                |            |         | ** .  |
| Ave  |              | 55.0        |      |         |        |       | +0.0 | 48.0                | 54.0       | -6.0    | Horiz |
| A  |              |             |      | -57.2   | +0.0   | +0.0  |      |                     | 201/47     |         |       |
| ^ 11399.700 67.6 +0.0 +38.8 +2.3 +6.9 +0.0 60.6 54.0 +6.6 Horiz M +2.2 -57.2 +0.0 +0.0 +0.0 20MHz 6.5MCSHT201S  16 22360.000 59.8 +0.0 +0.0 +0.0 +0.0 +0.0 47.9 54.0 -6.1 Horiz M +0.0 +0.0 +0.0 -16.2 Ave +4.3 10MHz 802.11a 24Mbps  17 11184.200 54.4 +0.0 +39.1 +2.3 +6.8 +0.0 47.5 54.0 -6.5 Horiz M +2.2 -57.3 +0.0 +0.0 Ave +0.0 20MHz   | Ave          |             | +0.0 |         |        |       |      |                     |            | 2010    |       |
| M +2.2 -57.2 +0.0 +0.0   | A 11200 F00  | 67.6        | .0.0 | . 20. 0 | . 2 2  |       | .0.0 | <i>(</i> 0 <i>(</i> |            |         | TT :  |
| +0.0  16 22360.000 59.8 +0.0 +0.0 +0.0 +0.0 +0.0 47.9 54.0 -6.1 Horiz  M +0.0 +0.0 +0.0 -16.2  Ave +4.3 10MHz 802.11a 24Mbps  17 11184.200 54.4 +0.0 +39.1 +2.3 +6.8 +0.0 47.5 54.0 -6.5 Horiz  M +2.2 -57.3 +0.0 +0.0  Ave +0.0 20MHz   |              | 67.6        |      |         |        |       | +0.0 | 60.6                | 54.0       | +6.6    | Horiz |
| 16 22360.000 59.8 +0.0 +0.0 +0.0 +0.0 +0.0 47.9 54.0 -6.1 Horiz  M +0.0 +0.0 +0.0 -16.2  Ave +4.3 10MHz 802.11a 24Mbps  17 11184.200 54.4 +0.0 +39.1 +2.3 +6.8 +0.0 47.5 54.0 -6.5 Horiz  M +2.2 -57.3 +0.0 +0.0  Ave +0.0 20MHz   | M            |             |      | -57.2   | +0.0   | +0.0  |      |                     | 201411     |         |       |
| 16 22360.000 59.8 +0.0 +0.0 +0.0 +0.0 +0.0 47.9 54.0 -6.1 Horiz  M +0.0 +0.0 +0.0 -16.2  Ave +4.3 10MHz 802.11a 24Mbps  17 11184.200 54.4 +0.0 +39.1 +2.3 +6.8 +0.0 47.5 54.0 -6.5 Horiz  M +2.2 -57.3 +0.0 +0.0  Ave +0.0 20MHz   |              |             | +0.0 |         |        |       |      |                     |            | 2010    |       |
| M +0.0 +0.0 +0.0 -16.2<br>Ave +4.3 10MHz 802.11a<br>24Mbps<br>17 11184.200 54.4 +0.0 +39.1 +2.3 +6.8 +0.0 47.5 54.0 -6.5 Horiz<br>M +2.2 -57.3 +0.0 +0.0<br>Ave +0.0 20MHz   | 16 00000 000 | <b>50.0</b> | .00  | . 0. 0  | . 0. 0 | .00   | .0.0 | 47.0                |            |         | TT. * |
| Ave +4.3 10MHz 802.11a 24Mbps  17 11184.200 54.4 +0.0 +39.1 +2.3 +6.8 +0.0 47.5 54.0 -6.5 Horiz  M +2.2 -57.3 +0.0 +0.0  Ave +0.0 20MHz  |              | 39.8        |      |         |        |       | +0.0 | 47.9                | 54.0       | -0.1    | Horiz |
| 24Mbps  17 11184.200 54.4 +0.0 +39.1 +2.3 +6.8 +0.0 47.5 54.0 -6.5 Horiz  M +2.2 -57.3 +0.0 +0.0  Ave +0.0 20MHz   |              |             |      | +0.0    | +0.0   | -16.2 |      |                     | 101/11 000 | 11.     |       |
| 17 11184.200 54.4 +0.0 +39.1 +2.3 +6.8 +0.0 47.5 54.0 -6.5 Horiz  M +2.2 -57.3 +0.0 +0.0  Ave +0.0 20MHz   | Ave          |             | +4.3 |         |        |       |      |                     |            | z.11a   |       |
| M $+2.2$ $-57.3$ $+0.0$ $+0.0$<br>Ave $+0.0$ 20MHz   | 17 11104 200 | E A A       | .00  | . 20. 1 | . 2. 2 | 0     | .0.0 | 47.5                |            | <i></i> | TT. * |
| Ave $+0.0$ 20MHz   |              | 54.4        |      |         |        |       | +0.0 | 47.5                | 54.0       | -6.5    | Horiz |
|  |              |             |      | -5/.3   | +0.0   | +0.0  |      |                     | 201411     |         |       |
| 6.5MCSH1201S   | Ave          |             | +0.0 |         |        |       |      |                     |            | 2016    |       |
|  |              |             |      |         |        |       |      |                     | 0.3MCSH1   | 2015    |       |

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| ^ 11184.200       | 67.5         | +0.0           | +39.1          | +2.3           | +6.8         | +0.0  | 60.6 | 54.0              | +6.6       | Horiz   |
|-------------------|--------------|----------------|----------------|----------------|--------------|-------|------|-------------------|------------|---------|
| M                 |              | +2.2           | -57.3          | +0.0           | +0.0         |       |      |                   |            |         |
|                   |              | +0.0           |                |                |              |       |      | 20MHz<br>6.5MCSHT | 201S       |         |
| 19 11180.000      | 54.4         | +0.0           | +39.1          | +2.3           | +6.8         | +0.0  | 47.5 | 54.0              | -6.5       | Vert    |
| M                 |              | +2.2           | -57.3          | +0.0           | +0.0         |       |      |                   |            |         |
| Ave               |              | +0.0           |                |                |              |       |      | 10MHz             |            |         |
|                   |              |                |                |                |              |       |      | 13MCSHT2          | 202S       |         |
| 20 10998.600      | 54.6         | +0.0           | +39.4          | +2.3           | +6.8         | +0.0  | 47.3 | 54.0              | -6.7       | Horiz   |
| M                 |              | +2.2           | -58.0          | +0.0           | +0.0         |       |      | 201411            |            |         |
| Ave               |              | +0.0           |                |                |              |       |      | 20MHz<br>6.5MCSHT | 201S       |         |
| ^ 10998.600       | 66.8         | +0.0           |                | +2.3           | +6.8         | +0.0  | 59.5 | 54.0              | +5.5       | Horiz   |
| M                 |              | +2.2           | -58.0          | +0.0           | +0.0         |       |      |                   |            |         |
|                   |              | +0.0           |                |                |              |       |      | 20MHz<br>6.5MCSHT | 201S       |         |
| 22 10989.200      | 54.4         | +0.0           | +39.4          | +2.3           | +6.8         | +0.0  | 47.1 | 54.0              | -6.9       | Vert    |
| M                 |              | +2.2           | -58.0          | +0.0           | +0.0         |       |      |                   |            |         |
| Ave               |              | +0.0           |                |                |              |       |      | 10MHz 24N         | _          |         |
| ^ 10989.200       | 66.1         | +0.0           | +39.4          | +2.3           | +6.8         | +0.0  | 58.8 | 54.0              | +4.8       | Vert    |
| M                 |              | +2.2           | -58.0          | +0.0           | +0.0         |       |      | 10) 411 241       | <b>4</b> 1 |         |
| 24 11207 (00      | <i>52.</i> 0 | +0.0           | 120.0          | +2.2           | 160          | .00   | 46.0 | 10MHz 24N         |            | XI =4   |
| 24 11397.600<br>M | 53.9         | $+0.0 \\ +2.2$ | +38.8<br>-57.2 | $+2.3 \\ +0.0$ | +6.9<br>+0.0 | +0.0  | 46.9 | 54.0              | -7.1       | Vert    |
| Ave               |              | +0.0           | -31.2          | +0.0           | +0.0         |       |      | 20MHz 802         | 11n        |         |
| 7110              |              | 10.0           |                |                |              |       |      | 6.5MCSHT          |            |         |
| ^ 11397.600       | 67.6         | +0.0           | +38.8          | +2.3           | +6.9         | +0.0  | 60.6 | 54.0              | +6.6       | Vert    |
| M                 |              | +2.2           | -57.2          | +0.0           | +0.0         |       |      |                   |            |         |
|                   |              | +0.0           |                |                |              |       |      | 20MHz 802         |            |         |
|                   |              |                |                |                |              |       |      | 6.5MCSHT          |            |         |
| 26 10990.900      | 54.2         | +0.0           | +39.4          | +2.3           | +6.8         | +0.0  | 46.9 | 54.0              | -7.1       | Vert    |
| M                 |              | +2.2           | -58.0          | +0.0           | +0.0         |       |      | 10) (1)           |            |         |
| Ave               |              | +0.0           |                |                |              |       |      | 10MHz             | 0026       |         |
| ^ 10990.900       | 66.6         | +0.0           | +39.4          | +2.3           | +6.8         | +0.0  | 59.3 | 13MCSHT2<br>54.0  | +5.3       | Vert    |
| ^ 10990.900<br>M  | 0.00         | +0.0           | +39.4<br>-58.0 | +2.3<br>+0.0   | +0.8         | +0.0  | 39.3 | 34.0              | +3.3       | vert    |
| 171               |              | +0.0           | 30.0           | 10.0           | 10.0         |       |      | 10MHz             |            |         |
|                   |              |                |                |                |              |       |      | 13MCSHT2          | 202S       |         |
| 28 11410.000      | 53.4         | +0.0           | +38.8          | +2.3           | +6.9         | +0.0  | 46.5 |                   |            | Horiz   |
| M                 |              | +2.2           | -57.1          | +0.0           | +0.0         |       |      |                   |            |         |
| Ave               |              | +0.0           |                |                |              |       |      | 10MHz             |            |         |
|                   |              |                |                |                |              |       |      | 13MCSHT2          |            |         |
| ^ 11410.000       | 67.6         | +0.0           | +38.8          | +2.3           | +6.9         | +0.0  | 60.7 | 54.0              | +6.7       | Horiz   |
| M                 |              | +2.2           | -57.1          | +0.0           | +0.0         |       |      | 101/01/101        | <b>(1)</b> |         |
| Λ 11410 000       | 6F 7         | +0.0           | 120.0          | 12.2           | 160          | ι Ο Ο | 500  | 10MHz 24N         | -          | IIo::'- |
| ^ 11410.000<br>M  | 65.7         | +0.0 +2.2      | +38.8<br>-57.1 | $+2.3 \\ +0.0$ | +6.9<br>+0.0 | +0.0  | 58.8 | 54.0              | +4.8       | Horiz   |
| 1V1               |              | +2.2 $+0.0$    | -5/.1          | ±0.0           | +0.0         |       |      | 10MHz             |            |         |
|                   |              | . 5.0          |                |                |              |       |      | 13MCSHT2          | 202S       |         |
| L                 |              |                |                |                |              |       |      |                   | ~~~        |         |

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| 31 22360.000      | 58.2        | +0.0           | +0.0           | +0.0  | +0.0        | +0.0 | 46.3 | 54.0           | -7.7       | Horiz  |
|-------------------|-------------|----------------|----------------|-------|-------------|------|------|----------------|------------|--------|
| M                 |             | +0.0<br>+4.3   | +0.0           | +0.0  | -16.2       |      |      | 10MHz 802      | 11         |        |
| Ave               |             | +4.3           |                |       |             |      |      | 13MCSHT2       |            |        |
| 32 11180.000      | 52.6        | +0.0           | +39.1          | +2.3  | +6.8        | +0.0 | 45.7 | 54.0           | -8.3       | Vert   |
| M                 |             | +2.2           | -57.3          | +0.0  | +0.0        |      |      |                |            |        |
| Ave               |             | +0.0           |                |       |             |      |      | 10MHz 24N      | Mbps       |        |
| 33 11178.950      | 52.6        | +0.0           | +39.1          | +2.3  | +6.8        | +0.0 | 45.7 | 54.0           | -8.3       | Horiz  |
| M                 |             | +2.2           | -57.3          | +0.0  | +0.0        |      |      |                |            |        |
| Ave               |             | +0.0           |                |       |             |      |      | 10MHz 24N      |            |        |
| ^ 11178.950       | 65.3        | +0.0           | +39.1          | +2.3  | +6.8        | +0.0 | 58.4 | 54.0           | +4.4       | Horiz  |
| M                 |             | +2.2           | -57.3          | +0.0  | +0.0        |      |      |                |            |        |
|                   |             | +0.0           |                |       |             |      |      | 10MHz 24N      |            |        |
| 35 10998.800      | 52.9        | +0.0           | +39.4          | +2.3  | +6.8        | +0.0 | 45.6 | 54.0           | -8.4       | Horiz  |
| M                 |             | +2.2           | -58.0          | +0.0  | +0.0        |      |      |                |            |        |
| Ave               |             | +0.0           |                |       |             |      |      | 20MHz 802      |            |        |
|                   |             |                |                |       |             |      |      | 6.5MCSHT       |            |        |
| ^ 10998.800       | 64.7        | +0.0           | +39.4          | +2.3  | +6.8        | +0.0 | 57.4 | 54.0           | +3.4       | Horiz  |
| M                 |             | +2.2           | -58.0          | +0.0  | +0.0        |      |      | 20141 002      |            |        |
|                   |             | +0.0           |                |       |             |      |      | 20MHz 802      |            |        |
|                   |             |                | • • • •        |       |             |      |      | 6.5MCSHT       |            |        |
| 37 11410.000      | 52.5        | +0.0           | +38.8          | +2.3  | +6.9        | +0.0 | 45.6 | 54.0           | -8.4       | Vert   |
| M                 |             | +2.2           | -57.1          | +0.0  | +0.0        |      |      | 10) (11 - 0.4) | <b>6</b> 1 |        |
| Ave               | <b>72</b> 0 | +0.0           | 20.4           | 2.2   |             | 0.0  |      | 10MHz 24N      |            | ** .   |
| 38 10989.200      | 52.8        | +0.0           | +39.4          | +2.3  | +6.8        | +0.0 | 45.5 | 54.0           | -8.5       | Horiz  |
| M                 |             | +2.2           | -58.0          | +0.0  | +0.0        |      |      | 10) (11 0 4)   | <b>6</b> 1 |        |
| Ave               | 57.1        | +0.0           | 0.0            | 0.0   | 0.0         | 0.0  | 45.0 | 10MHz 24N      | _          | ** .   |
| 39 22360.000      | 57.1        | +0.0           | +0.0           | +0.0  | +0.0        | +0.0 | 45.2 | 54.0           | -8.8       | Horiz  |
| M                 |             | +0.0           | +0.0           | +0.0  | -16.2       |      |      | 201411- 002    | 11.        |        |
| Ave               |             | +4.3           |                |       |             |      |      | 20MHz 802      | 2.11a      |        |
| 40 11180.000      | 52.0        | +0.0           | +39.1          | +2.3  | +6.8        | +0.0 | 45.1 | 24Mbps<br>54.0 | -8.9       | Vont   |
| 40 11180.000<br>M | 32.0        | $+0.0 \\ +2.2$ | +39.1<br>-57.3 | +2.5  | +0.0        | +0.0 | 43.1 | 34.0           | -8.9       | Vert   |
|                   |             | +2.2 $+0.0$    | -37.3          | +0.0  | +0.0        |      |      | 20MHz 802      | ) 11n      |        |
| Ave               |             | +0.0           |                |       |             |      |      | 6.5MCSHT       |            |        |
| 41 11180.000      | 51.9        | +0.0           | +39.1          | +2.3  | +6.8        | +0.0 | 45.0 | 54.0           | -9.0       | Vert   |
| M                 | 51.7        | +2.2           | +39.1<br>-57.3 | +2.3  | +0.8 $+0.0$ | ±0.0 | +5.0 | 54.0           | -2.0       | v CI t |
| Ave               |             | +2.2           | -51.5          | ±0.0  | +0.0        |      |      | 20MHz          |            |        |
| 7110              |             | 10.0           |                |       |             |      |      | 6.5MCSHT       | 2018       |        |
| ^ 11180.000       | 67.7        | +0.0           | +39.1          | +2.3  | +6.8        | +0.0 | 60.8 | 54.0           | +6.8       | Vert   |
| M                 | 07.7        | +2.2           | -57.3          | +0.0  | +0.0        | 10.0 | 00.0 | 54.0           | 10.0       | V 01 t |
| 141               |             | +0.0           | 51.5           | 10.0  | 10.0        |      |      | 10MHz          |            |        |
|                   |             | . 0.0          |                |       |             |      |      | 13MCSHT2       | 202S       |        |
| ^ 11180.000       | 66.4        | +0.0           | +39.1          | +2.3  | +6.8        | +0.0 | 59.5 | 54.0           | +5.5       | Vert   |
| M                 | 00.1        | +2.2           | -57.3          | +0.0  | +0.0        | 10.0 | 57.5 | 21.0           | 13.3       | , 511  |
|                   |             | +0.0           | 20             | . 0.0 |             |      |      | 20MHz 802      | 2.11n      |        |
|                   |             |                |                |       |             |      |      | 6.5MCSHT       |            |        |
| ^ 11180.000       | 64.8        | +0.0           | +39.1          | +2.3  | +6.8        | +0.0 | 57.9 | 54.0           | +3.9       | Vert   |
| M                 |             | +2.2           | -57.3          | +0.0  | +0.0        |      |      |                |            |        |
|                   |             | +0.0           |                |       |             |      |      | 10MHz 24N      | Mbps       |        |
| L                 |             |                |                |       |             |      |      |                | - I        |        |

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| ٨  | 11180.000 | 64.1 | +0.0 | +39.1  | +2.3   | +6.8  | +0.0 | 57.2 | 54.0        | +3.2  | Vert  |
|----|-----------|------|------|--------|--------|-------|------|------|-------------|-------|-------|
|    | M         |      | +2.2 | -57.3  | +0.0   | +0.0  |      |      |             |       |       |
|    |           |      | +0.0 |        |        |       |      |      | 20MHz       |       |       |
|    |           |      |      |        |        |       |      |      | 6.5MCSHT    | 201S  |       |
| 46 | 11400.100 | 51.5 | +0.0 | +38.8  | +2.3   | +6.9  | +0.0 | 44.5 | 54.0        | -9.5  | Vert  |
|    | M         |      | +2.2 | -57.2  | +0.0   | +0.0  |      |      |             |       |       |
|    | Ave       |      | +0.0 |        |        |       |      |      | 20MHz       |       |       |
|    |           |      |      |        |        |       |      |      | 6.5MCSHT    | 201S  |       |
| ^  | 11400.100 | 64.6 | +0.0 | +38.8  | +2.3   | +6.9  | +0.0 | 57.6 | 54.0        | +3.6  | Vert  |
|    | M         |      | +2.2 | -57.2  | +0.0   | +0.0  |      |      |             |       |       |
|    |           |      | +0.0 |        |        |       |      |      | 20MHz       |       |       |
|    |           |      |      |        |        |       |      |      | 6.5MCSHT    | 201S  |       |
| 48 | 10989.200 | 51.8 | +0.0 | +39.4  | +2.3   | +6.8  | +0.0 | 44.5 | 54.0        | -9.5  | Horiz |
|    | M         |      | +2.2 | -58.0  | +0.0   | +0.0  |      |      |             |       |       |
|    | Ave       |      | +0.0 |        |        |       |      |      | 10MHz       |       |       |
|    |           |      |      |        |        |       |      |      | 13MCSHT2    | 202S  |       |
| ^  | 10989.200 | 64.7 | +0.0 | +39.4  | +2.3   | +6.8  | +0.0 | 57.4 | 54.0        | +3.4  | Horiz |
|    | M         |      | +2.2 | -58.0  | +0.0   | +0.0  |      |      |             |       |       |
|    |           |      | +0.0 |        |        |       |      |      | 10MHz 24N   | Mbps  |       |
| ^  | 10989.200 | 63.6 | +0.0 | +39.4  | +2.3   | +6.8  | +0.0 | 56.3 | 54.0        | +2.3  | Horiz |
|    | M         |      | +2.2 | -58.0  | +0.0   | +0.0  |      |      |             |       |       |
|    |           |      | +0.0 |        |        |       |      |      | 10MHz       |       |       |
|    |           |      |      |        |        |       |      |      | 13MCSHT2    | 202S  |       |
| 51 | 11178.200 | 50.8 | +0.0 | +39.1  | +2.3   | +6.8  | +0.0 | 43.9 | 54.0        | -10.1 | Horiz |
|    | M         |      | +2.2 | -57.3  | +0.0   | +0.0  |      |      |             |       |       |
|    | Ave       |      | +0.0 |        |        |       |      |      | 20MHz 802   |       |       |
|    |           |      |      |        |        |       |      |      | 6.5MCSHT    |       |       |
| ^  | 11178.200 | 64.0 | +0.0 | +39.1  | +2.3   | +6.8  | +0.0 | 57.1 | 54.0        | +3.1  | Horiz |
|    | M         |      | +2.2 | -57.3  | +0.0   | +0.0  |      |      |             |       |       |
|    |           |      | +0.0 |        |        |       |      |      | 20MHz 802   |       |       |
|    |           |      |      |        |        |       |      |      | 6.5MCSHT    |       |       |
| 53 | 10995.500 | 50.9 | +0.0 | +39.4  | +2.3   | +6.8  | +0.0 | 43.6 | 54.0        | -10.4 | Vert  |
|    | M         |      | +2.2 | -58.0  | +0.0   | +0.0  |      |      |             |       |       |
|    | Ave       |      | +0.0 |        |        |       |      |      | 20MHz 802   |       |       |
|    |           |      |      |        |        |       |      |      | 6.5MCSHT    |       |       |
| ^  | 10995.500 | 64.6 | +0.0 |        | +2.3   | +6.8  | +0.0 | 57.3 | 54.0        | +3.3  | Vert  |
|    | M         |      | +2.2 | -58.0  | +0.0   | +0.0  |      |      | 20147       |       |       |
|    |           |      | +0.0 |        |        |       |      |      | 20MHz 802   |       |       |
|    | 22260 000 |      |      |        | 0.0    | 0.0   | 0.0  | 42.7 | 6.5MCSHT    |       | ** .  |
| 55 | 22360.000 | 55.4 | +0.0 | +0.0   | +0.0   | +0.0  | +0.0 | 43.5 | 54.0        | -10.5 | Horiz |
|    | M         |      | +0.0 | +0.0   | +0.0   | -16.2 |      |      | 20144 002   |       |       |
|    | Ave       |      | +4.3 |        |        |       |      |      | 20MHz 802   |       |       |
|    | 22260 000 | 70.0 | .00  | . 0. 0 | . 0. 0 | .0.0  | .0.0 | CO 4 | 6.5MCSHT    |       | TT. * |
|    | 22360.000 | 72.3 | +0.0 | +0.0   | +0.0   | +0.0  | +0.0 | 60.4 | 54.0        | +6.4  | Horiz |
|    | M         |      | +0.0 | +0.0   | +0.0   | -16.2 |      |      | 101/11/1992 | 11.   |       |
|    |           |      | +4.3 |        |        |       |      |      | 10MHz 802   | z.11a |       |
|    | 22260 000 | 70.4 | .0.0 | . 0. 0 | . 0. 0 | .0.0  | .00  | 50.5 | 24Mbps      | . 4 7 | TT. * |
|    | 22360.000 | 70.4 | +0.0 | +0.0   | +0.0   | +0.0  | +0.0 | 58.5 | 54.0        | +4.5  | Horiz |
|    | M         |      | +0.0 | +0.0   | +0.0   | -16.2 |      |      | 201411 002  | 11    |       |
|    |           |      | +4.3 |        |        |       |      |      | 20MHz 802   |       |       |
|    |           |      |      |        |        |       |      |      | 6.5MCSFT    | 2015  |       |

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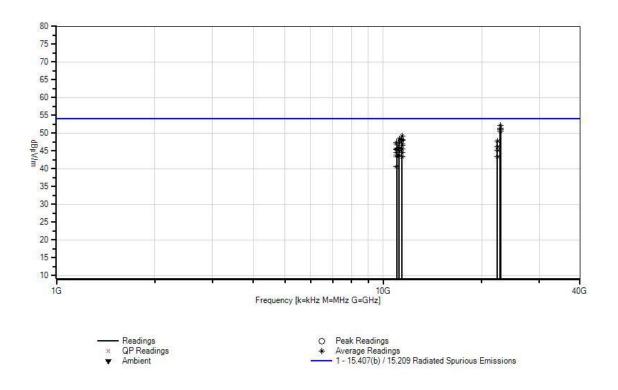


| ^ 22360  | 0.000 69.5 | +0.0 | +0.0  | +0.0 | +0.0  | +0.0 | 57.6 | 54.0     | +3.6  | Horiz |
|----------|------------|------|-------|------|-------|------|------|----------|-------|-------|
| N        | 1          | +0.0 | +0.0  | +0.0 | -16.2 |      |      |          |       |       |
|          |            | +4.3 |       |      |       |      |      | 20MHz 80 | 2.11a |       |
|          |            |      |       |      |       |      |      | 24Mbps   |       |       |
| ^ 22360  | 0.000 69.1 | +0.0 | +0.0  | +0.0 | +0.0  | +0.0 | 57.2 | 54.0     | +3.2  | Horiz |
| N        | 1          | +0.0 | +0.0  | +0.0 | -16.2 |      |      |          |       |       |
|          |            | +4.3 |       |      |       |      |      | 10MHz 80 | 2.11n |       |
|          |            |      |       |      |       |      |      | 13MCSHT  | ~202S |       |
| 60 11410 | 0.000 50.2 | +0.0 | +38.8 | +2.3 | +6.9  | +0.0 | 43.3 | 54.0     | -10.7 | Vert  |
| N        | 1          | +2.2 | -57.1 | +0.0 | +0.0  |      |      |          |       |       |
| Ave      |            | +0.0 |       |      |       |      |      | 10MHz    |       |       |
|          |            |      |       |      |       |      |      | 13MCSHT  | ~202S |       |
| ^ 11410  | 0.000 64.3 | +0.0 | +38.8 | +2.3 | +6.9  | +0.0 | 57.4 | 54.0     | +3.4  | Vert  |
| N        | 1          | +2.2 | -57.1 | +0.0 | +0.0  |      |      |          |       |       |
|          |            | +0.0 |       |      |       |      |      | 10MHz 24 | Mbps  |       |
| ^ 11410  | 0.000 62.7 | +0.0 | +38.8 | +2.3 | +6.9  | +0.0 | 55.8 | 54.0     | +1.8  | Vert  |
| N        | 1          | +2.2 | -57.1 | +0.0 | +0.0  |      |      |          |       |       |
|          |            | +0.0 |       |      |       |      |      | 10MHz    |       |       |
|          |            |      |       |      |       |      |      | 13MCSHT  | ~202S |       |
| 63 10994 | 1.950 47.9 | +0.0 | +39.4 | +2.3 | +6.8  | +0.0 | 40.6 | 54.0     | -13.4 | Vert  |
| N        | 1          | +2.2 | -58.0 | +0.0 | +0.0  |      |      |          |       |       |
| Ave      |            | +0.0 |       |      |       |      |      | 20MHz    |       |       |
|          |            |      |       |      |       |      |      | 6.5MCSH  | Γ201S |       |
| ^ 10994  | 1.950 61.6 | +0.0 | +39.4 | +2.3 | +6.8  | +0.0 | 54.3 | 54.0     | +0.3  | Vert  |
| N        | 1          | +2.2 | -58.0 | +0.0 | +0.0  |      |      |          |       |       |
|          |            | +0.0 |       |      |       |      |      | 20MHz    |       |       |
|          |            |      |       |      |       |      |      | 6.5MCSH  | Γ201S |       |
|          |            |      |       |      |       |      |      |          |       |       |

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CKC Laboratories, Inc. Date: 6/1/2012 Time: 16:30:00 Digital Path WO#: 92682 15.407(b) / 15.209 Radiated Spurious Emissions Test Distance: 3 Meters Sequence#: 207 Horiz UNII Bands. 20MHz Channel width.





Customer: **Digital Path** 

Specification: 15.407(b) / 15.209 Radiated Spurious Emissions

Work Order #:92682Date:6/1/2012Test Type:Radiated ScanTime:19:25:21Equipment:5GHz Panel (18dBi) + Omni (11dBi)Sequence#:209Manufacturer:Digital PathTested By:E. Wong

Model: G5RL10G S/N: EMI 2

# Test Equipment:

| 1 est Equi | pintenti |                   |                 |                  |              |
|------------|----------|-------------------|-----------------|------------------|--------------|
| ID         | Asset #  | Description       | Model           | Calibration Date | Cal Due Date |
| T1         | AN02668  | Spectrum Analyzer | E4446A          | 2/23/2011        | 2/23/2013    |
| T2         | AN02157  | Horn Antenna-ANSI | 3115            | 1/17/2011        | 1/17/2013    |
|            |          | C63.5             |                 |                  |              |
| T3         | AN03302  | Cable             | 32026-29094K-   | 3/21/2012        | 3/21/2014    |
|            |          |                   | 29094K-72TC     |                  |              |
| T4         | ANP01210 | Cable             | FSJ1P-50A-4A    | 3/15/2011        | 3/15/2013    |
| T5         | ANP05913 | Cable             | 32022-29094K-   | 8/30/2011        | 8/30/2013    |
|            |          |                   | 65TC            |                  |              |
| Т6         | AN03114  | Preamp            | AMF-7D-         | 5/13/2011        | 5/13/2013    |
|            |          |                   | 00101800-30-10P |                  |              |
|            | ANP05935 | Attenuator        | 84A-10          | 10/19/2011       | 10/19/2013   |
|            | ANP01211 | Attenuator        | 23-10-34        | 4/15/2011        | 4/15/2013    |
| T7         | AN01417  | High Pass Filter  | 84300-80039     | 2/9/2012         | 2/9/2014     |
|            | AN02694  | Active Horn       | AMFW-5F-        | 11/10/2010       | 11/10/2012   |
|            |          | Antenna-ANSI      | 18002650-20-10P |                  |              |
|            |          | C63.5 Antenna     |                 |                  |              |
|            |          | Factors (dB)      |                 |                  |              |
|            | AN02695  | Active Horn       | AMFW-5F-        | 11/10/2010       | 11/10/2012   |
|            |          | Antenna-ANSI      | 260400-33-8P    |                  |              |
|            |          | C63.5 Antenna     |                 |                  |              |
|            |          | Factors (dB)      |                 |                  |              |
|            | ANP05911 | Cable             | 32022-29094K-   | 8/30/2011        | 8/30/2013    |
|            |          |                   | 65TC            |                  |              |
|            | AN00730  | Preamp            |                 | 1/31/2011        | 1/31/2013    |
|            | AN00432  | Loop Antenna      | 6502            | 3/31/2011        | 3/31/2013    |
|            | AN00852  | Biconilog Antenna | CBL 6111C       | 11/16/2010       | 11/16/2012   |
|            | ANP05299 | Cable             | RG214           | 3/6/2011         | 3/6/2013     |
|            | ANP05300 | Cable             | RG214/U         | 3/7/2011         | 3/7/2013     |
|            | ANP05440 | Cable             |                 | 3/7/2011         | 3/7/2013     |

# Equipment Under Test (\* = EUT):

| Function             | Manufacturer | Model # | S/N   |
|----------------------|--------------|---------|-------|
| 5GHz Panel (18dBi) + | Digital Path | G5RL10G | EMI 2 |
| Omni (11dBi)*        |              |         |       |

# Support Devices:

| Function            | Manufacturer | Model #       | S/N             |
|---------------------|--------------|---------------|-----------------|
| Laptop Computer     | HP           | ProBook 6565b | 5CB13637ZF      |
| Laptop Power Supply | HP           | 608428-002    | F12941126327228 |

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The EUT installed on a pole as intended. DC power port is connected to a DC power supply via a CAT5 cable. The Ethernet port is connected to a remote laptop via unshielded twisted pair.

The Remote laptop is running test software to exercise the intended functionalities. Receiver circuit is activated.

11dBi Omni antenna is connected to radio 0 (instance 1) 18 dBi panel antenna is connected to radio1 (instance 2)

This data sheet is for the EUT transmitting via 18dBi Panel antenna connected to radio 1 (instance 2)

5250-5350MHz

Freq: 5275MHz, 5300MHz, 5325MHz.

BW = 10 MHz

802.11a: 24Mbps, TX power setting= 10.,10.,10 802.11n: 13MCSHT20 2S,TX power setting= 10.,10.,10

Freq: 5280MHz, 5300MHz, 5320MHz.

BW = 20MHz

802.11a: 9 Mbps, TX power setting 12.5,12.5,12.5

802.11n: 6.5MCS HT20 1S, TX power setting= 12.5,12.5,12.5

Temperature: 21.9°C, Relative Humidity: 38-43%, Atmospheric Pressure: 101.5kPa

No emission found. Detection was performed with reduced resolution bandwidth, recorded data represent noise floor level at required BW.

Frequency range of measurement = 9kHz-40GHz.

9 kH -150 kHz; RBW=200 Hz, VBW=200 Hz;150 kHz-30 MHz; RBW=9 kHz, VBW=9 kHz;30 MHz-1000 MHz; RBW=120 kHz, VBW=120 kHz,1000 MHz-40,000 MHz; RBW=1 MHz, VBW=1 MHz.

Recorded emission level is below the EIRP limit of -27dBm/MHz (68.2dBuV/m @ 3 meter) IAW 789033 D01 General UNII Test Procedures V01r01

Ext Attn: 0 dB

| Measu | rement Data: | Re   | eading list | ted by ma | argin. | Test Distance: 3 Meters |       |             |             |        |       |
|-------|--------------|------|-------------|-----------|--------|-------------------------|-------|-------------|-------------|--------|-------|
| #     | Freq         | Rdng | T1          | T2        | T3     | T4                      | Dist  | Corr        | Spec        | Margin | Polar |
|       |              |      | T5          | T6        | T7     |                         |       |             |             |        |       |
|       | MHz          | dΒμV | dB          | dB        | dB     | dB                      | Table | $dB\mu V/m$ | $dB\mu V/m$ | dB     | Ant   |
| 1     | 10640.000    | 52.2 | +0.0        | +39.3     | +2.3   | +6.7                    | +0.0  | 43.9        | 54.0        | -10.1  | Horiz |
|       | M            |      | +2.1        | -58.7     | +0.0   |                         |       |             |             |        |       |
|       |              |      |             |           |        |                         |       |             |             |        |       |
| 2     | 10650.000    | 51.6 | +0.0        | +39.3     | +2.3   | +6.7                    | +0.0  | 43.4        | 54.0        | -10.6  | Horiz |
|       | M            |      | +2.1        | -58.6     | +0.0   |                         |       |             |             |        |       |
|       |              |      |             |           |        |                         |       |             |             |        |       |
| 3     | 10600.000    | 51.7 | +0.0        | +39.3     | +2.3   | +6.7                    | +0.0  | 43.0        | 54.0        | -11.0  | Horiz |
|       | M            |      | +2.1        | -59.1     | +0.0   |                         |       |             |             |        |       |
|       |              |      |             |           |        |                         |       |             |             |        |       |
| 4     | 10600.000    | 51.3 | +0.0        | +39.3     | +2.3   | +6.7                    | +0.0  | 42.6        | 54.0        | -11.4  | Vert  |
|       | M            |      | +2.1        | -59.1     | +0.0   |                         |       |             |             |        |       |
|       |              |      |             |           |        |                         |       |             |             |        |       |

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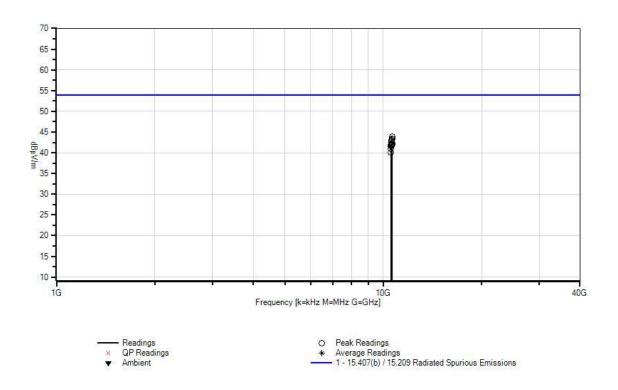


| 5  | 10650.000 | 50.5 | +0.0 | +39.3 | +2.3 | +6.7 | +0.0 | 42.3 | 54.0 | -11.7 | Vert  |
|----|-----------|------|------|-------|------|------|------|------|------|-------|-------|
|    | M         |      | +2.1 | -58.6 | +0.0 |      |      |      |      |       |       |
|    |           |      |      |       |      |      |      |      |      |       |       |
| 6  | 10640.000 | 50.3 | +0.0 | +39.3 | +2.3 | +6.7 | +0.0 | 42.0 | 54.0 | -12.0 | Vert  |
|    | M         |      | +2.1 | -58.7 | +0.0 |      |      |      |      |       |       |
|    |           |      |      |       |      |      |      |      |      |       |       |
| 7  | 10600.000 | 50.7 | +0.0 | +39.3 | +2.3 | +6.7 | +0.0 | 42.0 | 54.0 | -12.0 | Vert  |
|    | M         |      | +2.1 | -59.1 | +0.0 |      |      |      |      |       |       |
|    |           |      |      |       |      |      |      |      |      |       |       |
| 8  | 10600.000 | 50.6 | +0.0 | +39.3 | +2.3 | +6.7 | +0.0 | 41.9 | 54.0 | -12.1 | Horiz |
|    | M         |      | +2.1 | -59.1 | +0.0 |      |      |      |      |       |       |
|    |           |      |      |       |      |      |      |      |      |       |       |
| 9  | 10560.000 | 50.7 | +0.0 | +39.3 | +2.3 | +6.7 | +0.0 | 41.8 | 54.0 | -12.2 | Horiz |
|    | M         |      | +2.1 | -59.3 | +0.0 |      |      |      |      |       |       |
|    |           |      |      |       |      |      |      |      |      |       |       |
| 10 | 10550.000 | 50.5 | +0.0 | +39.3 | +2.3 | +6.7 | +0.0 | 41.7 | 54.0 | -12.3 | Horiz |
|    | M         |      | +2.1 | -59.2 | +0.0 |      |      |      |      |       |       |
|    |           |      |      |       |      |      |      |      |      |       |       |
| 11 | 10551.100 | 49.8 | +0.0 | +39.3 | +2.3 | +6.7 | +0.0 | 41.0 | 54.0 | -13.0 | Vert  |
|    | M         |      | +2.1 | -59.2 | +0.0 |      |      |      |      |       |       |
|    |           |      |      |       |      |      |      |      |      |       |       |
| 12 | 10560.000 | 49.0 | +0.0 | +39.3 | +2.3 | +6.7 | +0.0 | 40.1 | 54.0 | -13.9 | Vert  |
|    | M         |      | +2.1 | -59.3 | +0.0 |      |      |      |      |       |       |
|    |           |      |      |       |      |      |      |      |      |       |       |
|    |           |      |      |       |      |      |      |      |      |       |       |

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CKC Laboratories, Inc. Date: 6/1/2012 Time: 19:25:21 Digital Path WO#: 92682 15.407(b) / 15.209 Radiated Spurious Emissions Test Distance: 3 Meters Sequence#: 209 Vert UNII Bands. 20MHz Channel width.





Customer: **Digital Path** 

Specification: 15.407(b) / 15.209 Radiated Spurious Emissions

Work Order #:92682Date:6/3/2012Test Type:Radiated ScanTime:09:19:51Equipment:5GHz Panel (18dBi) + Omni (11dBi)Sequence#:210Manufacturer:Digital PathTested By:E. Wong

Model: G5RL10G S/N: EMI 2

#### Test Equipment:

| resi Equ | іртені.  |  |                              |                  |              |
|----------|----------|--|------------------------------|------------------|--------------|
| ID       | Asset #  | Description  | Model                        | Calibration Date | Cal Due Date |
| T1       | AN02668  | Spectrum Analyzer  | E4446A                       | 2/23/2011        | 2/23/2013    |
| T2       | AN02157  | Horn Antenna-ANSI<br>C63.5                                   | 3115                         | 1/17/2011        | 1/17/2013    |
| Т3       | AN03302  | Cable  | 32026-29094K-<br>29094K-72TC | 3/21/2012        | 3/21/2014    |
| T4       | ANP01210 | Cable  | FSJ1P-50A-4A                 | 3/15/2011        | 3/15/2013    |
| T5       | ANP05913 | Cable  | 32022-29094K-<br>65TC        | 8/30/2011        | 8/30/2013    |
| Т6       | AN03114  | Preamp   | AMF-7D-<br>00101800-30-10F   | 5/13/2011        | 5/13/2013    |
|          | ANP05935 | Attenuator   | 84A-10                       | 10/19/2011       | 10/19/2013   |
|          | ANP01211 | Attenuator   | 23-10-34                     | 4/15/2011        | 4/15/2013    |
| T7       | AN01417  | High Pass Filter   | 84300-80039                  | 2/9/2012         | 2/9/2014     |
| Т8       | AN02694  | Active Horn<br>Antenna-ANSI<br>C63.5 Antenna<br>Factors (dB) | AMFW-5F-<br>18002650-20-10F  | 11/10/2010       | 11/10/2012   |
|          | AN02695  | Active Horn<br>Antenna-ANSI<br>C63.5 Antenna<br>Factors (dB) | AMFW-5F-<br>260400-33-8P     | 11/10/2010       | 11/10/2012   |
| Т9       | ANP05911 | Cable  | 32022-29094K-<br>65TC        | 8/30/2011        | 8/30/2013    |
|          | AN00852  | Biconilog Antenna  | CBL 6111C                    | 11/16/2010       | 11/16/2012   |
|          | AN00730  | Preamp   |                              | 1/31/2011        | 1/31/2013    |
|          | ANP05299 | Cable  | RG214                        | 3/6/2011         | 3/6/2013     |
|          | ANP05300 | Cable  | RG214/U                      | 3/7/2011         | 3/7/2013     |
|          | ANP05440 | Cable  |                              | 3/7/2011         | 3/7/2013     |
|          |          |  |                              |                  |              |

# Equipment Under Test (\* = EUT):

| Function             | Manufacturer | Model # | S/N   |
|----------------------|--------------|---------|-------|
| 5GHz Panel (18dBi) + | Digital Path | G5RL10G | EMI 2 |
| Omni (11dBi)*        |              |         |       |

#### Support Devices:

| Support Devices.    |              |               |                 |
|---------------------|--------------|---------------|-----------------|
| Function            | Manufacturer | Model #       | S/N             |
| Laptop Computer     | HP           | ProBook 6565b | 5CB13637ZF      |
| Laptop Power Supply | HP           | 608428-002    | F12941126327228 |

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The EUT installed on a pole as intended. DC power port is connected to a DC power supply via a CAT5 cable. The Ethernet port is connected to a remote laptop via unshielded twisted pair.

The Remote laptop is running test software to exercise the intended functionalities. Receiver circuit is active.

11dBi Omni antenna is connected to radio 0 (instance 1) 18 dBi panel antenna is connected to radio1 (instance 2)

This data sheet is for the EUT transmitting via 18dBi Panel antenna connected to radio 1 (instance 2)

5470-5725MHz

Freq: 5495MHz, 5590MHz, 5705MHz.

BW = 10 MHz

802.11a: 24Mbps, TX power setting= 11, 11, 11

802.11n: 13MCS HT20 2S,TX power setting= 11, 11, 11

Freq: 5500MHz, 5590MHz, 5700MHz.

BW = 20MHz

802.11a: 24 Mbps, TX power setting= 13.5, 13.5, 12.5

802.11n: 6.5MCS HT20 1S, TX power setting= 13.5, 13.5, 11

Temperature: 21.9°C, Relative Humidity: 38-43%, Atmospheric Pressure: 101.5kPa

No emission found. Detection was performed with reduced resolution bandwidth, recorded data represent noise floor level at required BW.

Frequency range of measurement = 9kHz-40GHz.

9 kH -150 kHz; RBW=200 Hz, VBW=200 Hz;150 kHz-30 MHz; RBW=9 kHz, VBW=9 kHz;30 MHz-1000 MHz; RBW=120 kHz, VBW=120 kHz,1000 MHz-40,000 MHz; RBW=1 MHz, VBW=1 MHz.

Recorded emission level is below the EIRP limit of -27dBm/MHz (68.2dBuV/m @ 3 meter) IAW 789033 D01 General UNII Test Procedures V01r01

Ext Attn: 0 dB

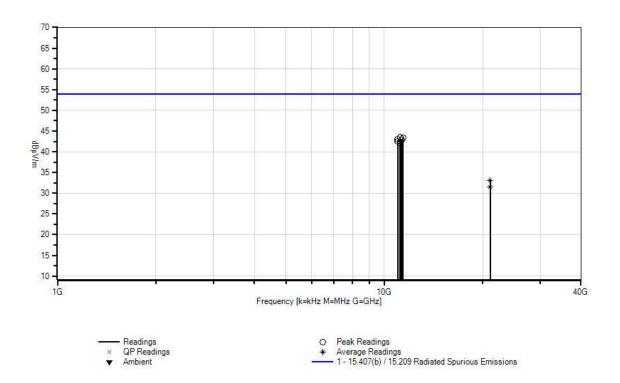
| Measu | rement Data: Reading listed by margin. |      |      | ırgin. | Test Distance: 3 Meters |      |       |             |             |        |       |
|-------|--|------|------|--------|-------------------------|------|-------|-------------|-------------|--------|-------|
| #     | Freq                                   | Rdng | T1   | T2     | T3                      | T4   | Dist  | Corr        | Spec        | Margin | Polar |
|       |  |      | T5   | T6     | T7                      | T8   |       |             |             |        |       |
|       |  |      | T9   |        |                         |      |       |             |             |        |       |
|       | MHz                                    | dΒμV | dB   | dB     | dB                      | dB   | Table | $dB\mu V/m$ | $dB\mu V/m$ | dB     | Ant   |
| 1     | 11189.000                              | 50.3 | +0.0 | +39.1  | +2.3                    | +6.8 | +0.0  | 43.5        | 54.0        | -10.5  | Vert  |
|       | M                                      |      | +2.2 | -57.2  | +0.0                    | +0.0 |       |             |             |        |       |
|       |  |      | +0.0 |        |                         |      |       |             |             |        |       |
| 2     | 11407.900                              | 50.2 | +0.0 | +38.8  | +2.3                    | +6.9 | +0.0  | 43.3        | 54.0        | -10.7  | Vert  |
|       | M                                      |      | +2.2 | -57.1  | +0.0                    | +0.0 |       |             |             |        |       |
|       |  |      | +0.0 |        |                         |      |       |             |             |        |       |
| 3     | 10990.000                              | 50.2 | +0.0 | +39.4  | +2.3                    | +6.8 | +0.0  | 42.9        | 54.0        | -11.1  | Vert  |
|       | M                                      |      | +2.2 | -58.0  | +0.0                    | +0.0 |       |             |             |        |       |
|       |  |      | +0.0 |        |                         |      |       |             |             |        |       |
| 4     | 11290.000                              | 49.6 | +0.0 | +39.0  | +2.3                    | +6.9 | +0.0  | 42.8        | 54.0        | -11.2  | Horiz |
|       | M                                      |      | +2.2 | -57.2  | +0.0                    | +0.0 |       |             |             |        |       |
|       |  |      | +0.0 |        |                         |      |       |             |             |        |       |

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| £ 11000 000 | 40.7 | . 0. 0 | . 20. 4 | .0.2 | 0     | . 0. 0 | 40.4 | 5 4 O | 11.6  | TT'   |
|-------------|------|--------|---------|------|-------|--------|------|-------|-------|-------|
| 5 11000.000 | 49.7 | +0.0   | +39.4   | +2.3 | +6.8  | +0.0   | 42.4 | 54.0  | -11.6 | Horiz |
| M           |      | +2.2   | -58.0   | +0.0 | +0.0  |        |      |       |       |       |
|             |      | +0.0   |         |      |       |        |      |       |       |       |
| 6 11180.000 | 49.0 | +0.0   | +39.1   | +2.3 | +6.8  | +0.0   | 42.1 | 54.0  | -11.9 | Horiz |
| M           |      | +2.2   | -57.3   | +0.0 | +0.0  |        |      |       |       |       |
|             |      | +0.0   |         |      |       |        |      |       |       |       |
| 7 21104.000 | 44.1 | +0.0   | +0.0    | +0.0 | +0.0  | +0.0   | 33.1 | 54.0  | -20.9 | Vert  |
| M           |      | +0.0   | +0.0    | +0.0 | -15.1 |        |      |       |       |       |
| Ave         |      | +4.1   |         |      |       |        |      |       |       |       |
| ^ 21104.000 | 57.1 | +0.0   | +0.0    | +0.0 | +0.0  | +0.0   | 46.1 | 54.0  | -7.9  | Vert  |
| M           |      | +0.0   | +0.0    | +0.0 | -15.1 |        |      |       |       |       |
|             |      | +4.1   |         |      |       |        |      |       |       |       |
| 9 21104.000 | 42.5 | +0.0   | +0.0    | +0.0 | +0.0  | +0.0   | 31.5 | 54.0  | -22.5 | Horiz |
| M           |      | +0.0   | +0.0    | +0.0 | -15.1 |        |      |       |       |       |
| Ave         |      | +4.1   |         |      |       |        |      |       |       |       |
| ^ 21104.000 | 56.6 | +0.0   | +0.0    | +0.0 | +0.0  | +0.0   | 45.6 | 54.0  | -8.4  | Horiz |
| M           |      | +0.0   | +0.0    | +0.0 | -15.1 |        |      |       |       |       |
|             |      | +4.1   |         |      |       |        |      |       |       |       |

CKC Laboratories, Inc. Date: 6/3/2012 Time: 09:19:51 Digital Path WO#: 92682 15.407(b) / 15.209 Radiated Spurious Emissions Test Distance: 3 Meters Sequence#: 210 Vert UNII Bands. 20MHz Channel width.

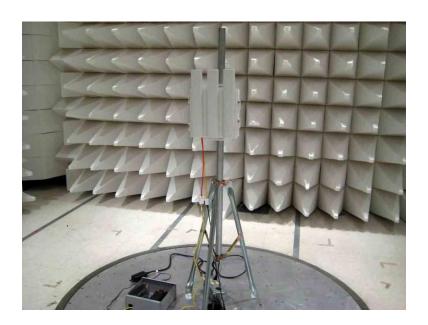




# Test Setup Photos

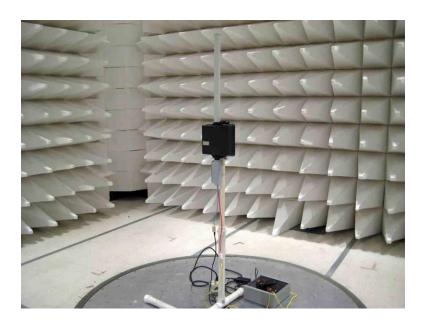


17dBi Sector

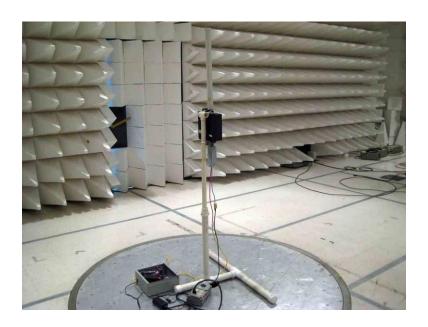


17dBi Sector





18dBi, 11dBi

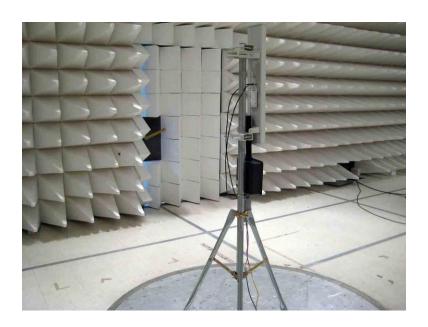


18dBi, 11dBi





20dBi Sector



20dBi Sector



# 15.407(g) Frequency Stability

# **Test Conditions / Setup**

FL and FH are frequency points where the portion of the fundamental emission crosses the limit line. The worst case FL and FH channels were determined during the radiated emissions testing and are listed below.

Worse case FL = 5252MHz, FH = 5346MHz in 5250-5350GHz band Worse case FL = 5475 MHz, FH= 5724MHz in 5470-5725GHz band

#### **Voltage Variations:**

Varied the voltage from 100-240VAC while monitoring FL and FH for each frequency band. There were no significant changes in FL and FH as the voltage was varied.

#### **Temperature Variations:**

During the temperature testing, the transmitter was set to either FL or FH at ambient temperature (20°C) and the 10dB down frequency was measured. This frequency is now the reference frequency for that setting. At each 10deg increment of temperature, the 10dB down frequency was measured. The difference between this frequency and the reference frequency was then added to the appropriate measured FL and FH for each frequency band. At each temperature, the device was allowed to soak for 1 hour before the measurements were made to ensure the device was at temperature.

The transmitter operating temperature range is 0 - 60°C.

Engineer Name: C. Nicklas

| Test Equipment |   |                         |                        |            |            |  |  |  |  |  |  |  |
|----------------|---|-------------------------|------------------------|------------|------------|--|--|--|--|--|--|--|
| Asset/Serial # | Description                             | Model                   | Manufacturer           | Cal Date   | Cal Due    |  |  |  |  |  |  |  |
| 02668          | Spectrum Analyzer                       | E4446A                  | Agilent                | 2/23/2011  | 2/23/2013  |  |  |  |  |  |  |  |
| P05843         | Cable                                   | 32022-2-<br>29094K-48TC | AstroLab               |            | 7/30/2012  |  |  |  |  |  |  |  |
| P05935         | Attenuator                              | 84A-10                  | Weinschel              | 10/19/2011 | 10/19/2013 |  |  |  |  |  |  |  |
| P05913         | Cable                                   | 32022-29094K-<br>65TC   | AstroLab               | 8/30/2011  | 8/30/2013  |  |  |  |  |  |  |  |
| P06239         | Attenuator                              | 54A-10                  | Weinschel              | 3/21/2012  | 3/21/2014  |  |  |  |  |  |  |  |
| 02721          | Temperature<br>Humidity<br>Chamber/Oven | SM-8C                   | Thermotron             | 6/14/2012  | 6/14/2014  |  |  |  |  |  |  |  |
| 03314          | Programmable<br>Power Source            | 4801iL                  | California Instruments | NCR        | NCR        |  |  |  |  |  |  |  |
| 02131          | Multimeter                              | DMM914                  | Tektronix              | 9/9/2011   | 9/9/2013   |  |  |  |  |  |  |  |

NCR: No calibration required because a calibrated multimeter was used to set and verify to voltage output of the power supply.

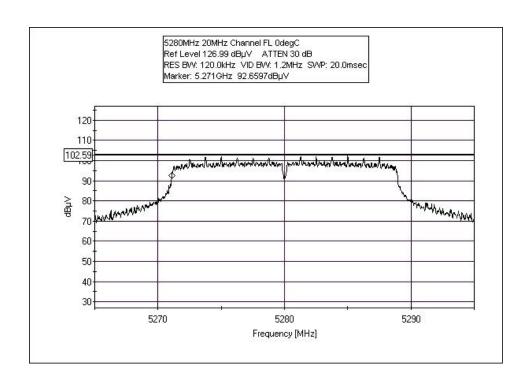
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Test Data

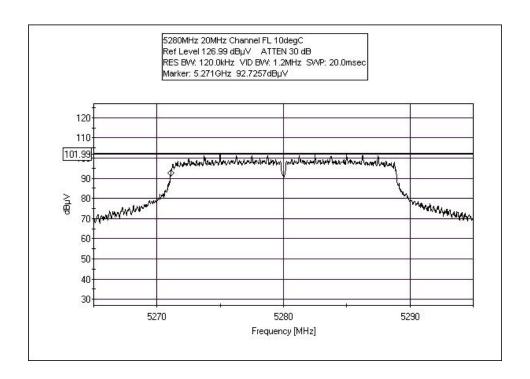
| Frequency Stability Data |                        |                  |                        |                  |
|--------------------------|------------------------|------------------|------------------------|------------------|
|                          | UNII 5.25-5.35GHz Band |                  | UNII 5.47-5.725Gz Band |                  |
| Temperature              | FL                     | FH               | FL                     | FH               |
| (°C)                     | (MHz)                  | (MHz)            | (MHz)                  | (MHz)            |
| 0                        | 5252.03                | 5346.00          | 5475.06                | 5724.00          |
| 10                       | 5252.03                | 5346.00          | 5475.03                | 5724.00          |
| 20                       | 5252.00                | 5346.00          | 5475.00                | 5724.00          |
| 30                       | 5252.00                | 5346.03          | 5475.03                | 5724.06          |
| 40                       | 5252.00                | 5346.03          | 5475.00                | 5724.06          |
| 50                       | 5252.00                | 5346.03          | 5475.03                | 5724.03          |
| 60                       | 5252.00                | 5346.00          | 5475.00                | 5724.00          |
| Limit                    | <u>&gt;</u> 5250       | <u>&lt;</u> 5350 | <u>&gt;</u> 5470       | <u>&lt;</u> 5725 |
| Data Rate                | 6.5MCSHT201S           | 9Mbps            | 24Mbps                 | 6.5MCSHT201S     |

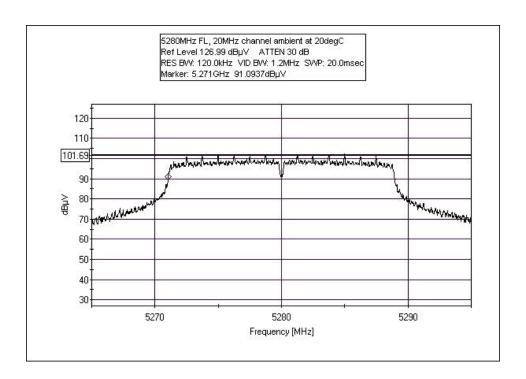
Input Voltage: 120VAC, 60Hz



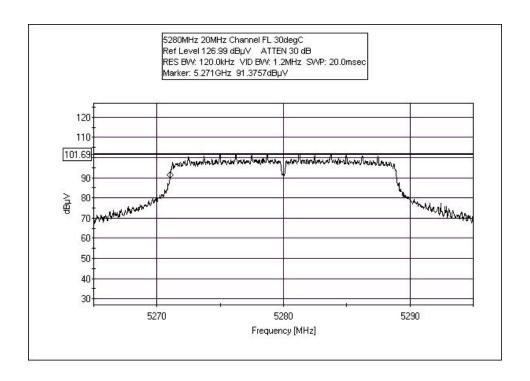
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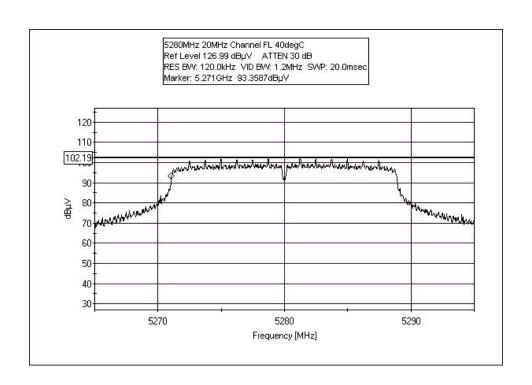




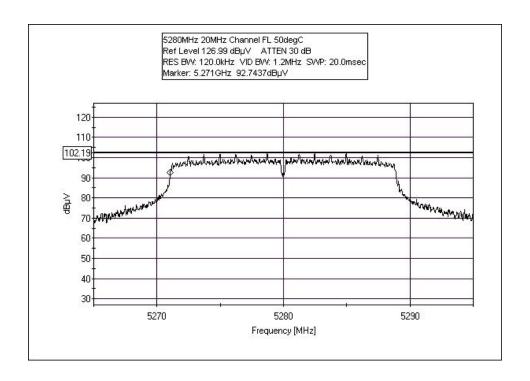


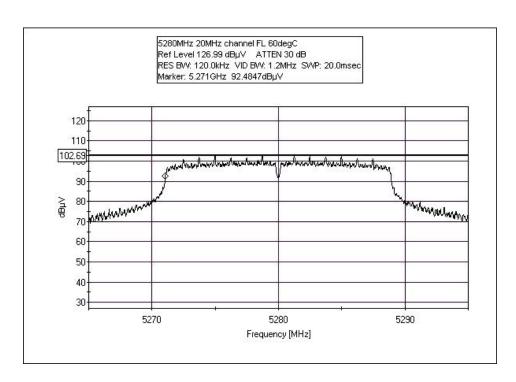




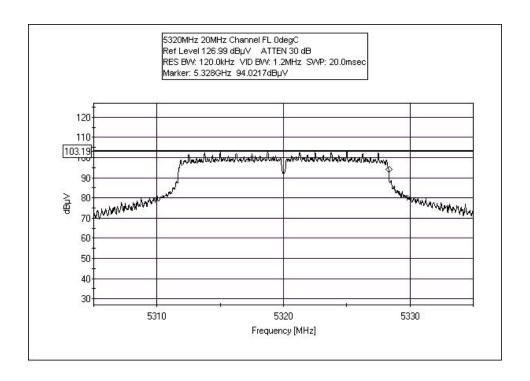


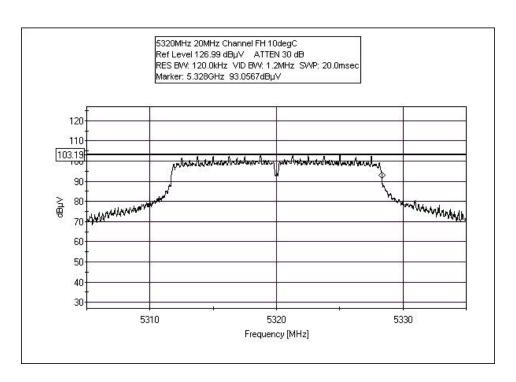




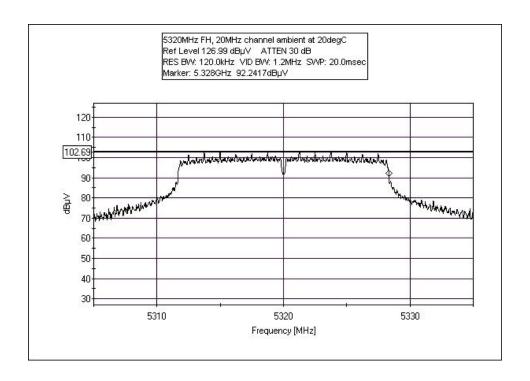


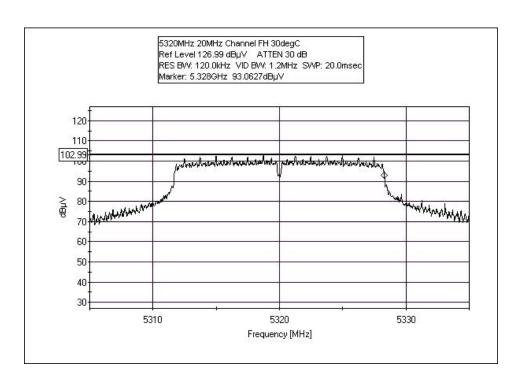




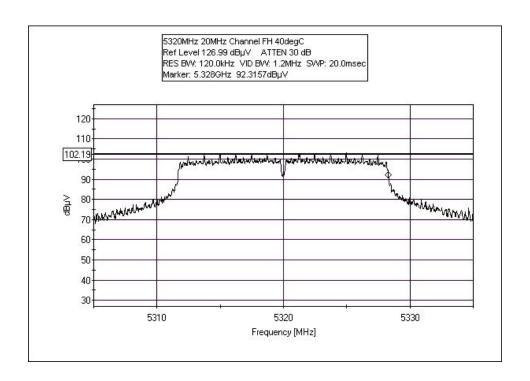


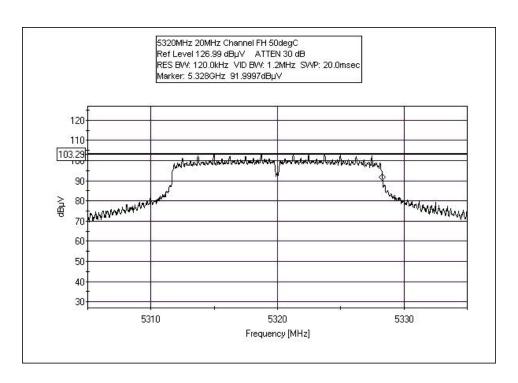




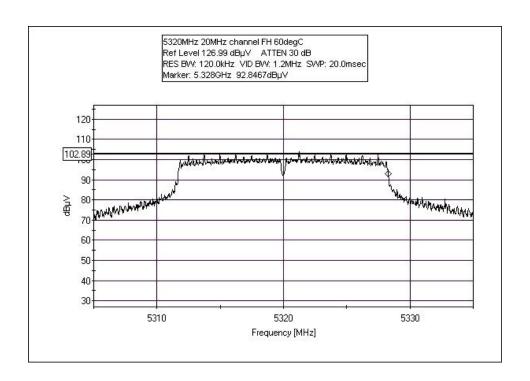




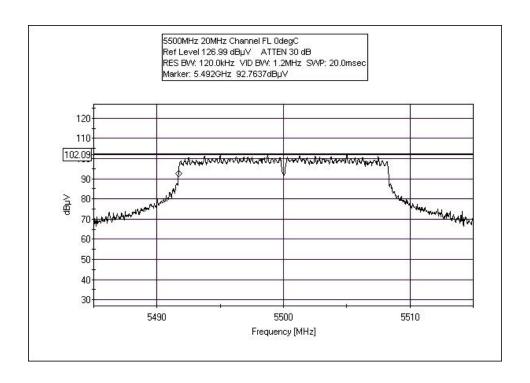


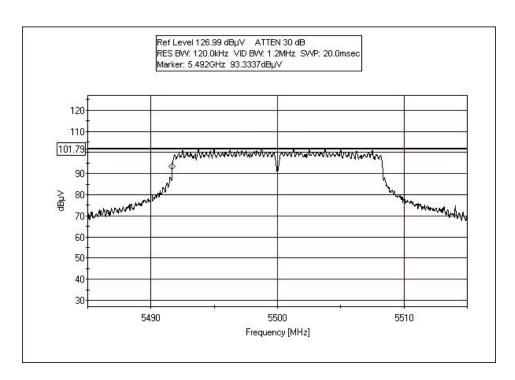




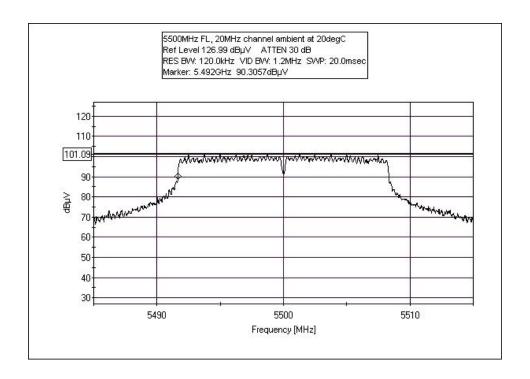


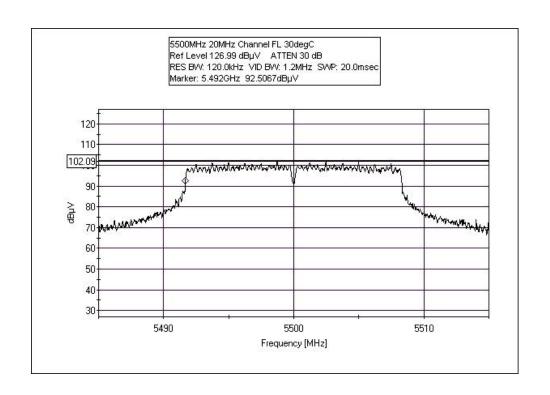




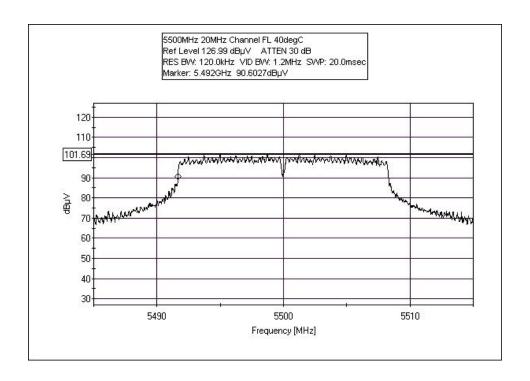


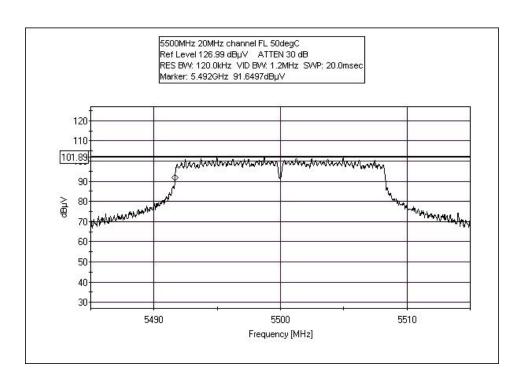




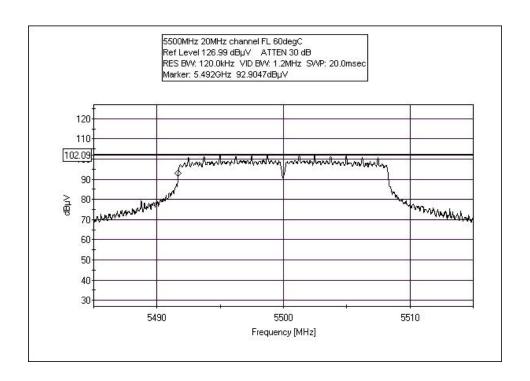


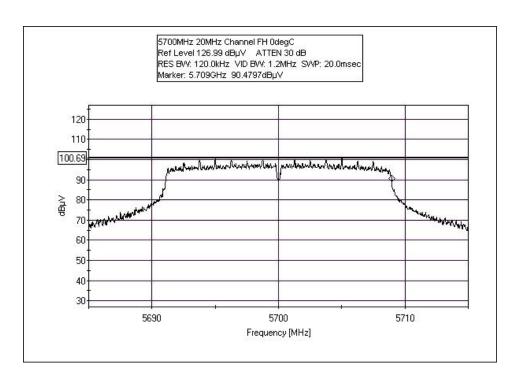




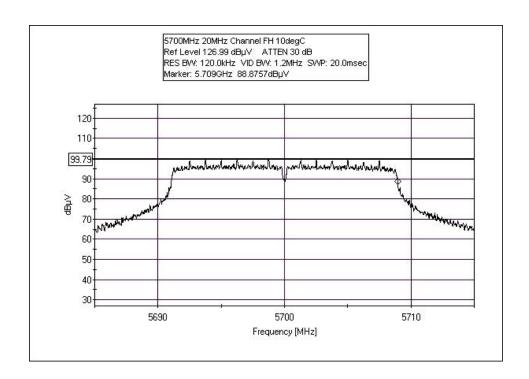


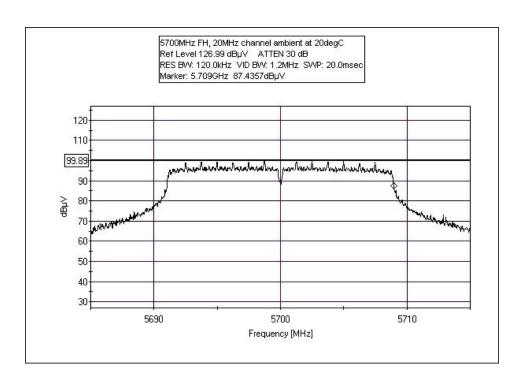




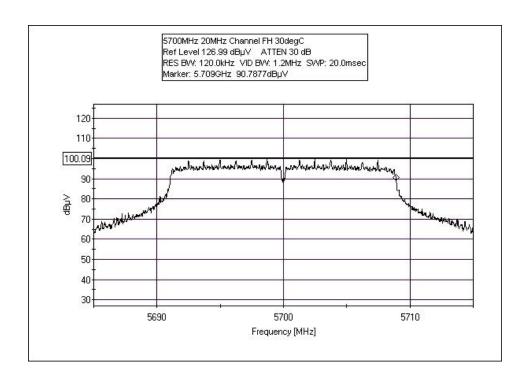


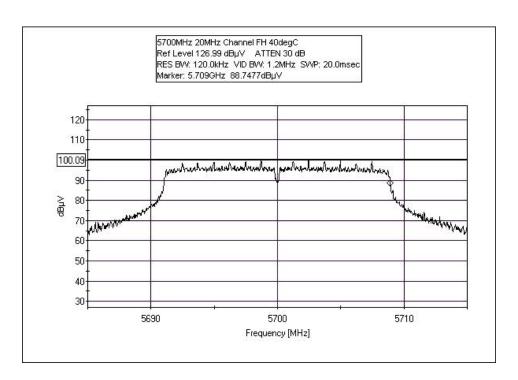




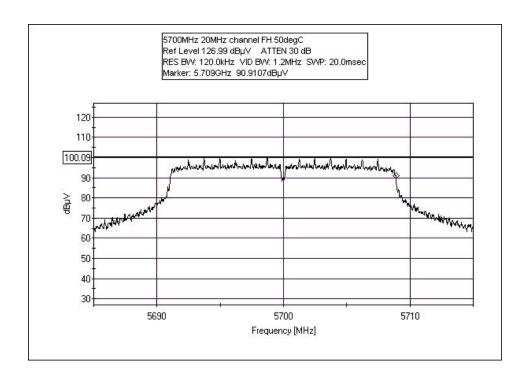


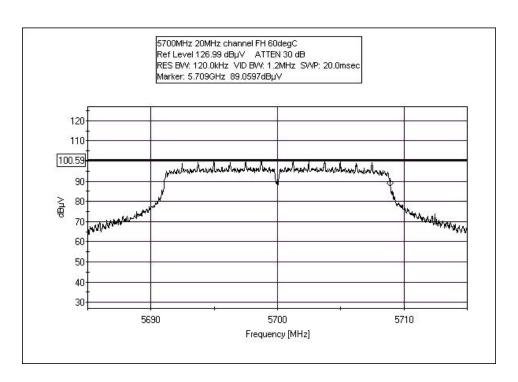














## **Test Setup Photos**



TEMP TEST



**VOLTAGE VARIATION**